

National Productivity Investment Fund for the Local Road Network Application Form



Department
for Transport

Applicant Information

Local authority name: Essex County Council

Bid Manager Name and position: Gary MacDonnell – Commissioning Delivery Manager

Contact telephone number: 07415 791950

Email address: gary.macdonnell@essex.gov.uk

Postal address: Essex County Council
County Hall
Market Road
Chelmsford
Essex
CM1 1QH

Please specify the web link where this bid will be published:

<http://www.essexhighways.org/highway-schemes-and-developments/bids-and-funding/A120-Millennium-Way-Slips.aspx>

Name of Project: A120 Millennium Way Slips

Date: June 30, 2017

SECTION A - Project description and funding profile

A1 Project name: A120 Millennium Way Slips

A2 Please enter a brief description of the proposed project (no more than 50 words):
 The A120 forms an east-west route linking the M11 and Stansted Airport with the A12, Colchester and Harwich. Braintree is located half way along this corridor. The proposal adds two slip roads to connect with Millennium Way (B1018) to relieve congestion and provide improved access and accommodate growth.

A3 Please provide a short description of area covered by the bid (no more than 50 words):
 OS Grid Reference: TL 77482 21904
 Postcode: CM7 3XP

The location of the bid is in the south east corner of Braintree, specifically, the area to the north and south of the A120 in the vicinity of Millennium Way overbridge. The roundabout to the east of the map is the congested Galley's Corner.

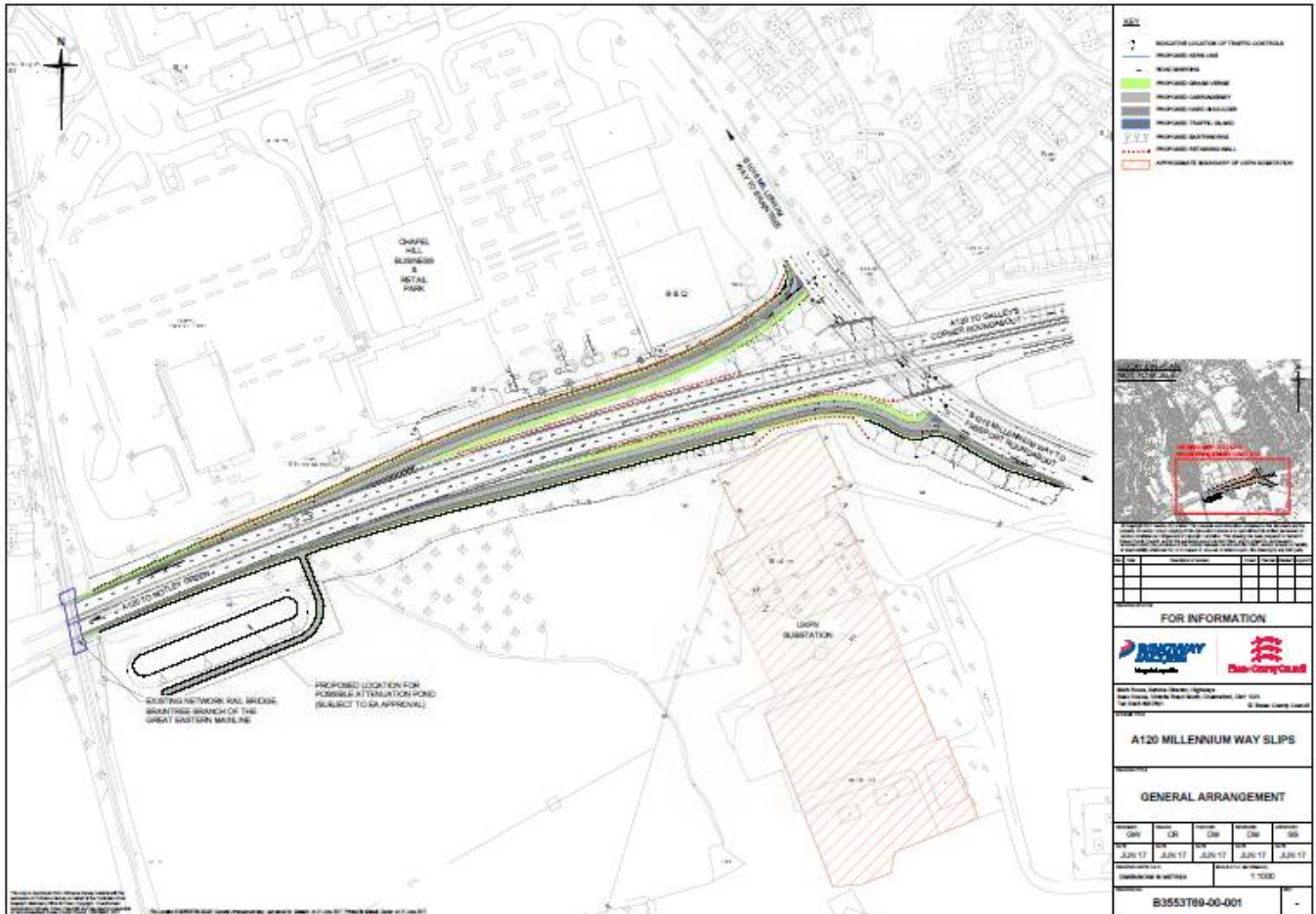


Fig 1: A120 / Millennium Way, Braintree (for a wider area map please see Appendix A1)

A4 How much funding are you bidding for ? (Please tick the relevant box):

Small project bids (requiring DfT funding of between £2m and £5m)

Large project bids (requiring DfT funding of between £5m and £10m)

A5 *Has any Equality Analysis been undertaken in line with the Equality Duty ?*

Yes, the standard Essex County Council (ECC) Equality Analysis has been undertaken for this project and can be provided, if required.

A6 *Work will involve / include:-*

- SELEP – support. (The scheme is listed in SELEP’s SEP) (Appendix B1)
- Highways England –technical support and advice; with respect to land financial aspects, (£3m) and as trunk road operator (Appendix C1)
- Braintree District Council – support for scheme, including financial (£2.5m) (Appendix C2)
- Haven Gateway Partnership – support for scheme
- A120 Strategic Partnership Board comprising of Highways England, Essex County Council and Essex Highways
- Realm Ltd – owners of Freeport, Braintree – support for scheme
- Williams Group – land owners
- Network Rail – rail bridge over the A120 located 500m south west from Millennium Way
- UK Power Networks – Electricity sub-station located 60m south west from Millennium Way.

A7 *Combined Authority (CA) Involvement*

Have you appended a letter from the Combined Authority supporting this bid ? No – N/A

A8 *Local Enterprise Partnership (LEP) Involvement and support for housing delivery*

Have you appended a letter from the LEP supporting this bid ? Yes (Appendix B1)

For proposed projects which encourage the delivery of housing, have you appended supporting evidence from the house builder / developer ?

Because local plans are in development, it is not possible to provide letters from specific builders / developers at this time. It should be noted that the emerging local plan for Braintree includes housing growth figures up to 14,000 new homes by 2033.

SECTION B – The Business Case

B1 *Project Summary - Please select what the project is trying to achieve (select all categories that apply)*

Essential

- Ease urban congestion
- Unlock economic growth and job creation opportunities
- Enable the delivery of housing development

Desirable

- Improve air quality and reduce CO₂ emissions
- Incentivising skills and apprentices

Other(s)

X Improve access – especially Freeport Retail Outlet, Braintree

B2 Please provide evidence on the following questions (max 100 words for each answer):

a) What is the problem that is being addressed ?

Galley's Corner roundabout is severely over-capacity and significantly impacts the movement of people and goods along the A120. Data shows during the morning peak hour traffic queues extend from Galley's Corner back to Marks Farm roundabout (distance 1.5km). Figure 1 shows that 95% of traffic on this link is travelling at less than the free flow speed. This situation is even more acute in the evening peak (as shown in figure 2) and indeed significant delays are evident at weekends (figure 3). Appendix K includes more detailed validation of these delays showing a worsening situation over the past three years.

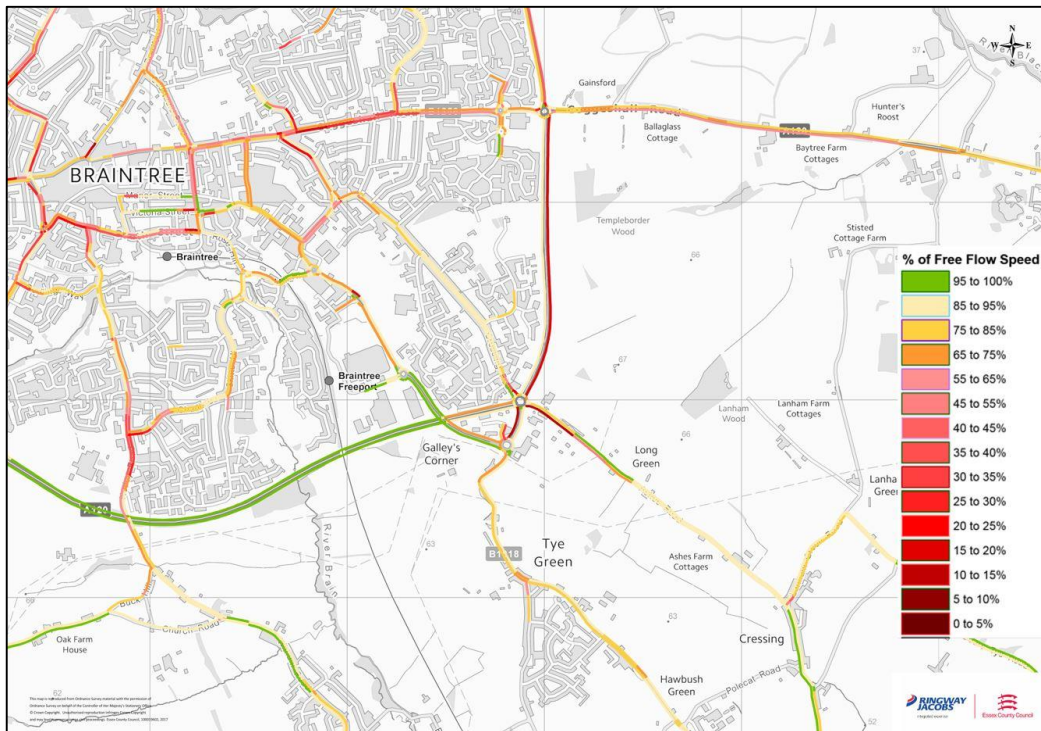


Fig 2: Millennium Way Slips – Trafficmaster plot AM Peak Hour

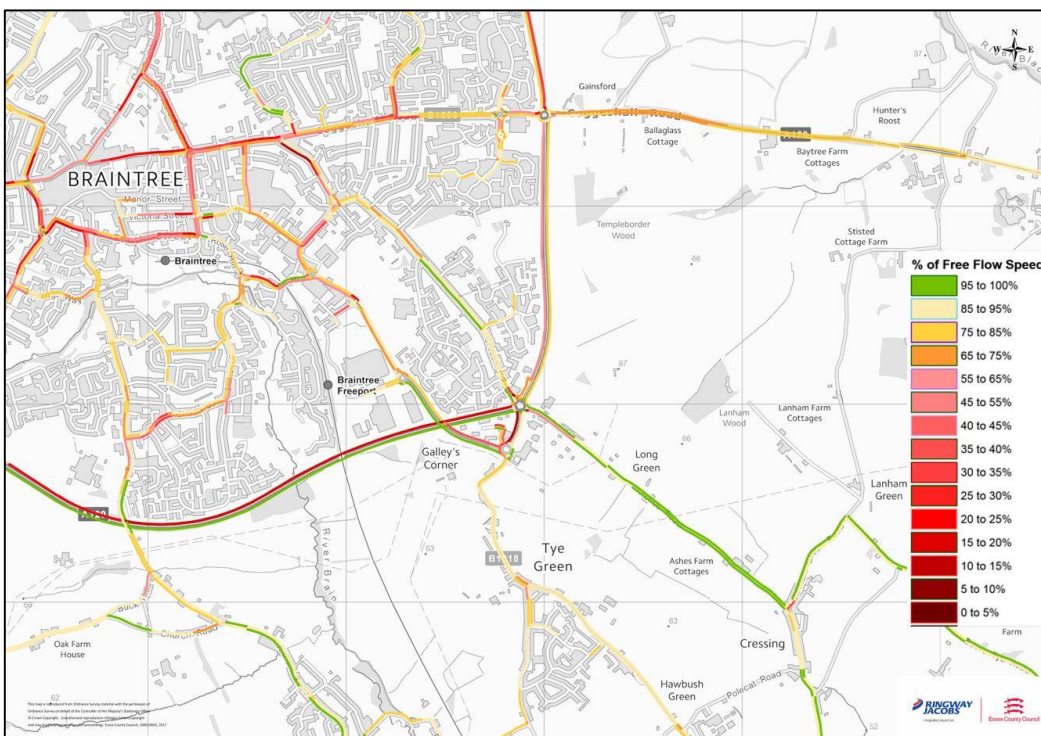


Fig 3: Millennium Way Slips – Trafficmaster plot PM Peak Hour

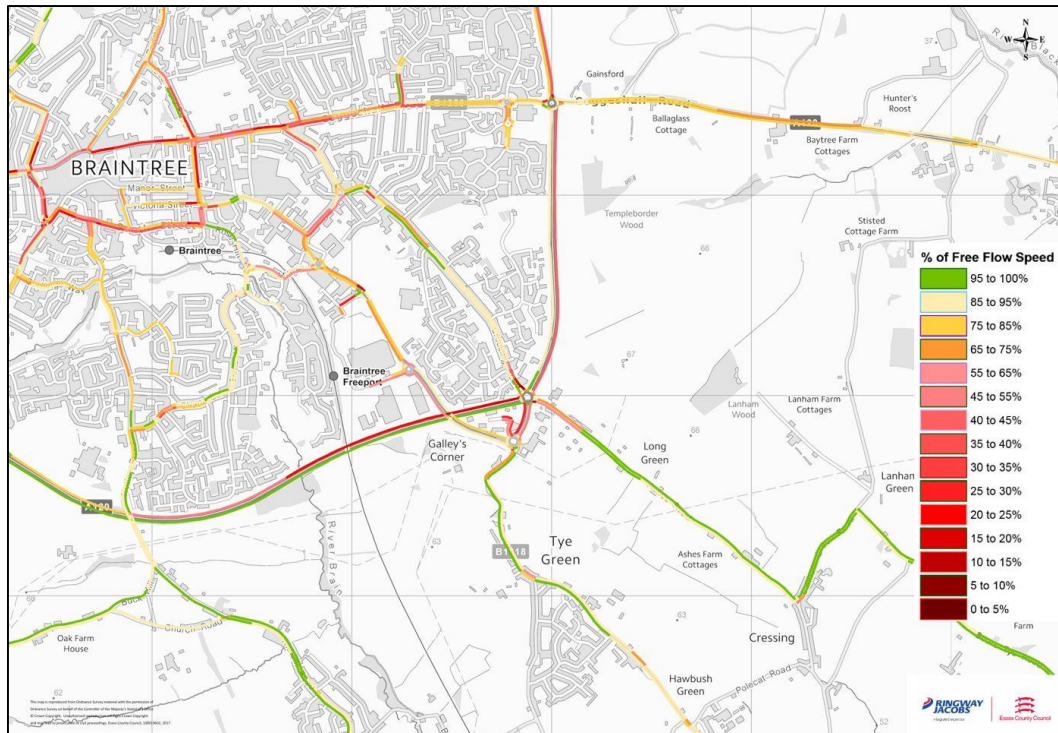


Fig 4: Millennium Way Slips – Trafficmaster plot Saturday Peak Hour

b) *What options have been considered and why have alternatives been rejected ?*

Various alternatives for the slip roads have been investigated and the proposed scheme is favoured to minimise land take and limit departure from DfT standards on the slips. In the longer term, a major options study, led by ECC, is being undertaken to improve and dual the A120 eastwards from Braintree to the A12. Five alternative schemes have been through public consultation and the preferred route is being investigated further. The bid for the slip roads is entirely consistent with all route options and will provide necessary relief to the current junction, in the interim, before the major route upgrade.

c) *What are the expected benefits / outcomes ? For example, could include easing urban congestion, job creation, enabling a number of new dwellings, facilitating increased GVA.*

The scheme will deliver:-

- Alleviation of existing congestion and capacity constraints at Galley's Corner Roundabout,
- Provision of more efficient transport of goods and people through Essex
- Localised housing growth – Braintree 9,650 homes including the proposed Garden Community during the plan period up to 2033 (for further details appendix J).
- Unlock job creation – 700 jobs in the Braintree area and growth at Stansted Airport, especially for the increasing percentage of business fliers
- Further growth along and near the corridor (57,000 new homes), including Uttlesford, Colchester, Chelmsford and Tendring (see appendix J)
- Improved air quality
- Incentivised skills and apprenticeship opportunities – at Stansted and through Ringway Jacobs.

d) *Are there any related activities that the success of this project relies upon ? For example, land acquisition, other transport interventions requiring separate funding or consents ?*

Land required for the scheme belongs to Highways England (HE), ECC or the Williams Group, who have all indicated their support for the project. This scheme will act as an enabler for the larger project, as forward projections still indicate a significant problem at the major pinch point, Galley's Corner, requiring action to be taken in the interim. Emerging Local Plans for Braintree, Colchester and Uttlesford require this improvement to avoid this being a blocker to delivering the growth set out in Local Plans. The

scheme will also provide much needed capacity improvements to enable the proposed Garden Communities.

e) *What will happen if funding for this project is not secured - would an alternative (lower cost) solution be implemented (if yes, please describe this alternative and how it differs from the proposed project)?*

The scheme could be split into two sections – 1) the northbound slip off the A120 onto Millennium way, and 2) the southbound slip from Millennium way onto the A120. However, based on initial analysis, only constructing one of the slips, would significantly reduce the overall impact of the junction improvement. It is unlikely that the project would go ahead without some external funding.

f) *What is the impact of the project – and any associated mitigation works – on any statutory environmental constraints ? For example, Local Air Quality Management Zones.*

There are no known environmental constraints or AQMAs. However, air quality will be significantly improved in the area due to reductions in queuing traffic. Air quality modelling improvements will be undertaken as part of the major A120 study noted in b) above.

B3 Table A: Funding profile (Nominal terms) £000s

	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>Total</u>	<u>%</u>
DfT funding sought		£1,500	£3,447		£4,947	35.5
ECC contribution	£250	£1,000	£400	£1,850	£3,500	25.1
Braintree District Council contribution			£2,500		£2,500	17.9
Highways England contribution		£500	£2,500		£3,000	21.5
TOTAL	£250	£3,000	£8,847	£1,850	£13,947	100.0

Please see Appendix D1 for the detailed breakdown of costs. The cost estimate includes scheme development cost, inflation and quantified risk assessment, but does not include optimism bias. Commensurate with the stage of the scheme development, 44% optimism bias should be added for the purposes of economic appraisal. This is discussed in more detail in Appendix E2

Note 1: Negotiations are ongoing with Braintree DC with a view for their funding contribution to increase from £2.5m to £3m. ECC have agreed to fund if these discussions are unsuccessful and the above costs reflect this.

Note 2: Although HE has indicated they will support the scheme financially as per above, to date, written confirmation has not been received. However, in the event that HE are unable to commit to the £3 million contribution and to provide financial surety ECC will make provision to cover this amount if the funding contribution does not materialise.

B4 Local Contribution & Third Party Funding:

Please provide information on the following questions [max 100 words on items a) and b)]:

a) *Provide an outline of all non-DfT funding contributions to the project costs, the level of commitment, and when the contributions will become available.*

Highways England have indicated that they are willing to financially add support to this scheme alongside the significant proposed work on the dualling and re-routing of the A120. Also, because of its strategic importance, both ECC and Braintree District Council have confirmed their willingness to support the scheme to the tune of £3.5m and £2.5m respectively. Total non DfT funding is £9.0m i.e. 64.5%.

b) *List any other funding applications you have made for this project, or variants thereof, and the outcome of these applications, including any reasons for rejection.*

An application was made to SELEP for Round 3 of the Growth Fund, but, unfortunately, on a ranking basis, because of other priorities, it did not make the top 20 schemes that were selected to go forward as part of the Growth Deal.

B5 Economic Case

A) Requirements for small project bids (i.e. DfT contribution of less than £5m)

a) *Please provide a description of your assessment of the impact of the project to include:*

Positive impacts will accrue from reduced emissions and improved air quality as a consequence of the reduction in traffic delays in the vicinity of the junction. Negative impacts will occur as a result of the traffic management requirements during construction, but every attempt will be taken to mitigate and minimize the effects by maximising working off-line.

- *Key risks and uncertainties:*

- Obtaining HE dispensation with regard to the design of the two slips which is nominally away from standard
- Need to seek agreement with the landowners adjacent to the HE land (Network Rail, UK Power Networks and Realm Ltd) which will be affected by the works
- Need to reach an agreement with Network Rail regarding the proximity of the south slip to the railway bridge
- Impact of Utilities, particularly regarding the south slip and the Electricity sub-station.

A VISSIM model has been constructed including Millennium Way, Galley's Corner and Fowler's Farm roundabouts. Under 2018 future year flows, in either AM, PM or Saturday peak conditions, introduction of the slip roads enables all vehicles to enter the network, results in shorter queues and lower journey times than the base model. More extensive modelling is being undertaken as part of the A120 study.

No detailed appraisal, e.g. applying model results in TUBA has been undertaken at this stage, but a simplified spreadsheet calculation indicated a BCR of 4.15, based on a 2018 Base Year and a 2031 forecast year.

b) *Small project bidders should provide the following in annexes as supporting material:*

Has a Project Impacts Pro Forma been appended ?	Yes (Appendix E1)
Has a description of data sources / forecasts been appended ?	Yes (Appendix E2)
Has an Appraisal Summary Table been appended ?	Yes (Appendix F1)

B6 Economic Case:

i) *Has Defra's national air quality assessment, as reported to the EU Commission, identified and / or projected an exceedance in the area where the project will be implemented?* No

ii) *Is there one or more Air Quality Management Areas (AQMAs) in the area where the project will be implemented? AQMAs must have been declared on or before the 31 March 2017.* No

iii) *What is the project's impact on local air quality?* Positive

Positive impacts will accrue from improved emissions and air quality as a consequence of the reduction in traffic delays in the vicinity of the junction.

iv) *Does the project promoter incentivise skills development through its supply chain?*

Ringway Jacobs, who are in partnership with ECC as Essex Highways, has an active skills development and apprenticeship programme provided through Anglia Ruskin University and Adalta Development. Advanced apprenticeship courses, Supervisory & Management Diplomas, Chartered Management courses and Royal Institution Master Classes are all available through the scheme.

B7. Management Case - Delivery (Essential)

a) *Has a project plan been appended to your bid ?* Yes (Appendix G1)

b) *Has a letter relating to land acquisition been appended ?*

A full engrossment letter transferring ownership of the appropriate parcels of non ECC / HE land is available, if required.

c) *Please provide in Table C summary details of your construction milestones (at least one, but no more than six) between start and completion of works:*

Table C: Construction milestones **Estimated Date**

Start of works	January 2019
Completion of works & opening date	June 2020

d) *Please list any major transport projects costing over £5m in the last 5 years which the authority has delivered, including details of whether these were completed to time and budget (and if not, whether there were any mitigating circumstances).*

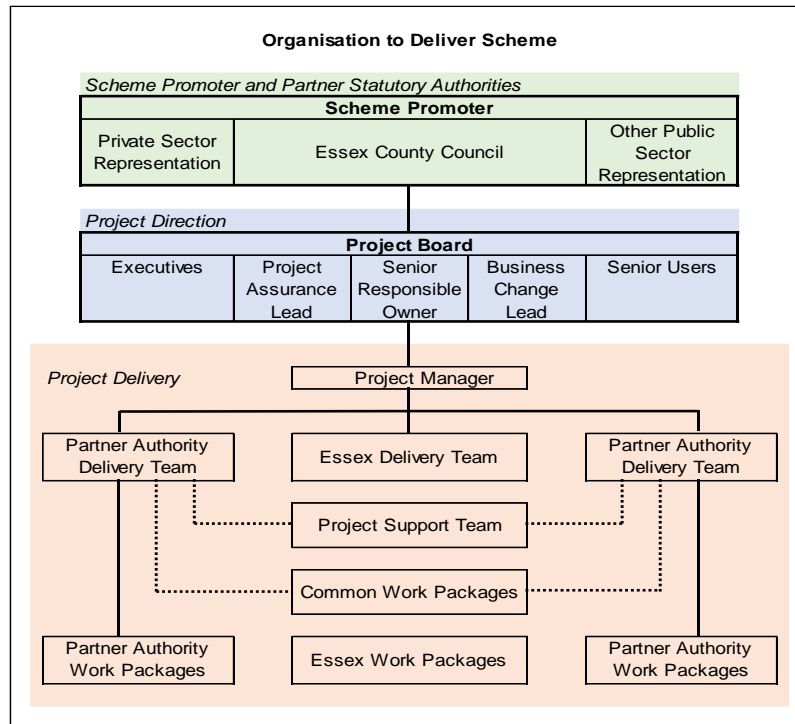
The following transport projects have all been completed on time and to budget:-

- | | |
|---|--------|
| • Sadlers Farm Interchange | £63.5m |
| • Roscommon Way Extension | £12.1m |
| • Basildon Enterprise Corridor | £14.5m |
| • Northern Approach Road III | £14.5m |
| • A127 Capacity Enhancements | £ 9.2m |
| • Colchester Integrated Transport Package (ITP) | £12.7m |
| • Colchester Park and Ride | £ 7.2m |
| • Colchester Town Centre Traffic & Access | £ 5.0m |
| • South East LSTF Programme | £ 5.4m |

B8 Management Case – Statutory Powers and Consents (Essential)

No statutory powers or consents have been obtained and none are required.

B9. Management Case – Governance (Essential)



The Project Board – is responsible for the direction and overall management of the scheme. The Project Board is chaired by the Senior Responsible Owner and made up of the Executive and Senior User for each of the partner statutory authorities, the Project Assurance Lead and the Business Change Lead. These roles are defined below. Project Board meetings are normally held every six weeks. The Project Manager reports regularly to the Project Board, keeping members informed of progress and highlighting any issues or concerns.

The responsibilities of the Project Board include:

- Setting the strategic direction of the project;
- Defining the scope and setting the timescales for major project milestones;
- Approving the appointment of the Project Manager;
- Providing the Project Manager with the strategy and decisions required to enable the scheme to proceed to programme and resolve any challenges;
- Securing necessary approvals through the partner statutory authorities;
- Approving the project scope of work, programme and budgets, as well as any subsequent changes;
- Signing off completion of each stage of the project and authorising the start of the next stage; and
- Monitoring project risks and taking any appropriate action to mitigate risks.

Strategic Partnership Board – formed from Highways England and ECC and is responsible for managing the scheme and handling of any issues. HE will also provide technical support and advice.

Delivery Teams – reporting to the Project Manager, the Delivery Teams (one for each partner statutory authority) are responsible for organising and delivering work packages on the highways under the authority's jurisdiction. The Essex Delivery Team has the additional responsibility for common work packages.

Project Support – this team is responsible for project administration, including document control, project team communications, arranging meetings, updating plans, and chasing up the completion of actions.

Individual Roles:

Senior Responsible Owner (Andrew Cook, Director, Highways & Transportation, ECC) – has ultimate responsibility and delegated authority for ensuring effective delivery of the scheme on time and on budget.

Project Manager (Elliot Smith, Infrastructure Project Manager, ECC) – is the individual responsible for organising, controlling and delivering the scheme. The Project Manager leads and manages the project team, with the authority and responsibility to run the project on a day-to-day basis. They also will be assigned the task of running and updating the risk register and organising the monitoring of the delivery of the programme objectives.

Executives – represent the group in each partner statutory authority with responsibility for obtaining funding for the scheme (Chris Stevenson, Head of Connected Essex Integrated Transport, ECC) and securing resources to deliver it (Ben Finlayson, Head of Infrastructure Delivery, ECC).

Sponsor – the role of major sponsor is coordinated through the Transportation Strategy and Engagement Group (Alan Lindsay, ECC).

Commissioning Delivery Manager (Gary MacDonnell, Project Manager, Commissioning Delivery, ECC) - The Commissioning Delivery Manager will provide coordinated management of projects associated with change management activities to achieve the aims and objectives associated with external funding requirements.

Senior Users (including David Forkin, Senior Manager, Head of Maintenance; Sean Perry, Head of Transportation, Planning and Development, ECC and Braintree District Council) – represent the group who will oversee the future day-to-day operation of the scheme.

Project Assurance Lead (Erwin Deppe, Client Services Director, Ringway Jacobs) – provides an independent view of how the scheme is progressing. Tasks include checking that the project remains viable, in terms of costs and benefits (business assurance), the users' requirements are being met (user assurance), and that the project is delivering a suitable solution (technical assurance).

B10 Management Case - Risk Management (Essential)

Has a QRA been appended to your bid ? Yes (Appendix H1)

Risks were identified for each scheme component (identified in the Cost Estimate breakdown, Appendix D1) and assigned pre-mitigation probability, severity and likely ranges of cost impact, as shown in Appendix H1, with median values used in lieu of probabilistic modelling to obtain a P50 value.

Has a Risk Management Strategy been appended to your bid ? See paragraph below

ECC will initiate a proactive risk management procedure, including a quantified risk assessment which ensures that risks are continuously identified, owners assigned and mitigation measures put in place. Regular reviews check the status of each risk and regulate their control and mitigation.

Project procedures also require that, should the likelihood or severity of risks be identified as increasing by this process, responsibility for its mitigation is escalated upwards through the project management chain to ensure that this is achieved. All risks are owned by the partner authorities. As the project develops, it is expected that some of these risks will be transferred to construction contractors.

In addition, Essex County Council uses a proprietary online Risk Register to assess levels of risk and to track the progress of the strategy for the scheme.

a) What risk allowance has been applied to the project cost ?

Risks are based on risk profile output, pre-mitigation P50 (See Appendix H1).

b) How will cost overruns be dealt with ?

Essex County Council will bear all risk for the project as part of its role as the Highways Authority.

c) What are the main risks to project timescales and what impact this will have on cost ?

- Lack of coordination with Network Rail on work adjacent to railway bridge
- Lack of coordination with UK Power Networks on work adjacent to electricity sub-station
- Lack of coordination with HE
- Lack of coordination with other landowners.

All could affect project programme and costs, but allowed for in the QRA.

B11 Management Case - Stakeholder Management (Essential)

a) *Strategy for managing stakeholders:*

Stakeholder Plan

- Public consultation to secure engagement and buy-in will be required and outcomes of this consultation will be taken into account.
- Ongoing liaison with key stakeholders (HE, Braintree District Council, Realm – Freeport, Braintree) essential to ensure buy-in, especially in delivery and decision making.

The stakeholder plan will:

- Communicate and reinforce branding;
- Improve awareness and understanding of the proposals;
- Allow the Project Board to obtain feedback on the proposals;
- Help gauge the level and nature of any opposition and address these appropriately; and
- Enable the Project Team to establish consensus.

b) *Can the project be considered as controversial in any way ?* No

c) *Have there been any external campaigns either supporting or opposing the project ?* No

B12 Management Case – Local MP support (Desirable)

Does this proposal have the support of the local MP(s) ?

Because of the recent General Election, it has not been possible to obtain support from the new ministers in time for this bid.

B13 Management Case - Assurance (Essential)

We will require Section 151 Officer confirmation (Section D) that adequate assurance systems are in place. See Section D2 below

SECTION C – Monitoring, Evaluation and Benefits Realisation

C2 *Please set out, in no more than 100 words, how you plan to measure and report on the benefits of this project, alongside any other outcomes and impacts of the project.*


A detailed Benefits Realisation Plan will be developed to confirm the benefits of the scheme. Lessons learned from prior projects will be reviewed and incorporated.


The scheme will have an evaluation plan, independently reviewed, and monitored in accordance with this plan. Monitoring will be done according to government guidance and will, where appropriate, include 1 and 5 year reports.

Surveys will capture volumes, patterns of movement and journey times. Traffic volumes, speeds and journey times will be monitored, together with the outcomes of proposed housing and developments.

Road safety impacts will be monitored to verify future accident incidences, numbers and locations.

SECTION D: Declarations

<i>D1. Senior Responsible Owner Declaration</i>	
As Senior Responsible Owner for the Millennium Way Slips Project, I hereby submit this request for approval to DfT on behalf of Essex County Council and confirm that I have the necessary authority to do so.	
I confirm that Essex County Council will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.	
Name: Andrew Cook	Signed: 
Position: Director Highways and Transportation	

<i>D2 Section 151 Officer Declaration</i>	
As Section 151 Officer for Essex County Council, I declare that the project cost estimates quoted in this bid are accurate to the best of my knowledge and that Essex County Council:	
<ul style="list-style-type: none"> - has allocated sufficient budget to deliver this project on the basis of its proposed funding contribution - accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties - accepts responsibility for meeting any ongoing revenue requirements in relation to the project - accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided for this bid in 2020/21. - confirms that the authority has the necessary governance / assurance arrangements in place and, for smaller project bids, the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place - confirms that if required a procurement strategy for the project is in place, is legally compliant and is likely to achieve the best value for money outcome. 	
Name: Nicole Wood, Director of Finance and Procurement	Signed: 

HAVE YOU INCLUDED THE FOLLOWING WITH YOUR BID?

Combined Authority multiple bid ranking note (if applicable)	N/A
Map showing location of the project and its wider context	Yes – Appendix A1
Combined Authority support letter (if applicable)	N/A
LEP support letter	Yes – Appendix B1
Highways England support letter	Yes – Appendix C1
Braintree District Council support letter	Yes – Appendix C2
House builder / developer evidence letter (if applicable)	No
Land acquisition letter	No – See above
Cost Schedule	Yes – Appendix D1
Projects impact pro forma (must be a separate MS Excel)	Yes – Appendix E1
Description of data sources / forecasts	Yes – Appendix E2
Appraisal summary table	Yes – Appendix F1

Project plan / Gantt chart
QRA

Yes – Appendix G1
Yes – Appendix H1