

4th December 2020

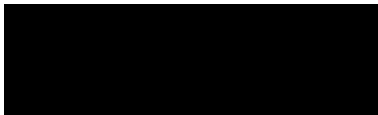
Mrs Elizabeth Smith
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Dear Elizabeth,

Re: Stansted 35+ Planning Inquiry Ref: 3256619- ESA and TAA Erratum

Following submission of the Environmental Statement Addendum (ESA) and the Transport Assessment Addendum (TAA) to the Planning Inspectorate and Uttlesford District Council submitted in October 2020, it has been picked up that a minor reporting error has occurred in the TAA which forms Volume 3 of the ESA. Please see the enclosed erratum which provides a 3 page summary along with a revised TAA Chapter 7 with all consequential changes highlighted and the original text struck through.

Sincerely,



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STANSTED 35+ APPEAL REFERENCE APP/C1570/W/20/3256619

**Erratum to Transport Assessment Addendum (TAA) and Environmental
Statement Addendum (ESA) of October 2020**

JCG24573

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1st December 2020

Introduction

Following submission of the ES Addendum (ESA) to the Planning Inspectorate and Uttlesford District Council (UDC) and after receiving clarification requests from consultees including Stop Stansted Expansion (SSE), it has been noted that a minor reporting error has occurred in the Transport Assessment Addendum (TAA) which forms Volume 3 of the ESA of October 2020.

The error in the TAA relates to STAL's transport consultants, Steer, accidentally transposing (swapping) the airport passenger flows leaving Bassingbourn Roundabout onto the A120 in an eastbound and westbound direction. This occurred due to mis-referencing of one cell within the surface access spreadsheet analysis. However, the impact of the error is negligible and not material; for example, in the daily 2032 Development Case (43 mppa) scenario there is a maximum -3.4% decrease in traffic in the A120 West direction towards Junction 8 of the M11 and a maximum +5.5% increase in the A120 East link.

For the sake of completeness and transparency, TAA Chapter 7: Highways Impact Assessment is enclosed in full at **Annex 1** to this note with all consequential changes highlighted and the original text struck through. Because of the transposition is so relatively minor, the full suite of tables and flow diagrams in Appendix A and B of the TAA (amounting to 82 pages) have not been attached to this note.

The replacement chapter demonstrates that there are no material changes to the transport impact assessment as a result of this data inputting error. No other chapters of the TAA are affected.

Implications to the ESA

This error has implications, albeit of a very minor nature, to the corresponding assessment of surface access environmental effects (Chapter 6), surface access noise (Chapter 9) and air quality (Chapter 10) of the ESA. Therefore, for the sake of transparency and good order, this Erratum note has been produced for the purpose of correcting this mistake and to explain its consequences.

STAL's consultant teams have carefully considered the implications of this error and have revisited relevant aspects of the ESA accordingly. This analysis is presented below and does not change the conclusions made within the ESA. As such, it is considered that there is no need to withdraw or replace these chapters in their entirety.

Surface Access Effects (Chapter 6 of the ESA)

To a very minor extent, the data inputting error affects Figure 6.3 and Figure 6.4 of the ESA, whereupon traffic flows on the A120 E and A120 W shown on these figures are reversed. These figures are the same as Figures 7.2 and 7.3 of the TAA, as shown in Annex 1 to this Erratum. Therefore, it would serve no practical purpose to replace these figures for the ESA also.

Table 6.13 of the ESA is affected due to the slightly greater increase in peak hour traffic flows on the A120E link road off Bassingbourn Roundabout and slightly lower increase in traffic in Thremhall Avenue compared to that reported in the original table. The data inputting error only affects traffic flows along the A120. There is a small increase in flows on the A120 East, and a corresponding reduction in flows on the A120 West. These changes are denoted in red in the amended table provided below.

With regards to the A120 E link, this is now included in the table because, at +12,9%, the future increase in traffic exceeds the 10% threshold suggested in the IEMA guidelines for assessing highways impacts. However, this change remains negligible and well below the +30% IEMA threshold which would constitute a minor impact. (see page 5 of Chapter 6 of the 2018 ES for a further explanation of these guidelines).

Replacement Table 6.13: Assessment of Environmental

Impact - Highway Criteria Applied to Assessed Links/Junction Above the 10% Threshold

Criteria	Assessed Links/Junction		
	Link Bassingbourn Roundabout to A120 E (Figure 6.4 Ref: 2)	Thremhall Avenue (Figure 6.4 Ref: 4)	M11 Junction 8
Changes in daily vehicle flows on local roads (links)	Minor Negative (increase of less than 12.9% on peak hour operations)	Minor Negative (increase of less than 22.4 21.2% on peak hour operations)	Minor Negative (increase of less than 10% on peak hour operations)
Severance	Not Applicable (no communities affected)	Not Applicable (no communities affected)	Not Applicable (no communities affected)
Driver Delay	Negligible (No change in driver delay)	Negligible (No change in driver delay)	Minor Negative (increase in driver delay)
Pedestrian Delay	Not Applicable (no pedestrian crossings or footways on these links / junctions)		
Pedestrian Amenity	Not Applicable (no pedestrian crossings or footways on these links /junctions)		
Accidents and Safety	Negligible (minimal change in collision risk for link / junctions)	Negligible (minimal change in collision risk for link / junctions)	Negligible (minimal change in collision risk for links / junctions)
Fear and Intimidation	Not Applicable (no pedestrians at risk of fear and intimidation on these links / junctions)		

In respect to changes in the text of Chapter 6 of the ESA, the only necessary amendment would be to paragraph 6.7.28 which should now read:

“By comparison with the traffic growth detailed above, predicted traffic increases arising from the increase from the current cap of 35mmpa to the proposed uplifted cap of 43mmpa are modest, as illustrated in Figure 6.4. This shows the impact of the proposed development to be limited to less than 2% on most local roads; to be no more than 10% on the trunk roads; and, greater than 10% only on Thremhall Avenue and the short link between Thremhall Avenue to the A120 East”.

Surface Access Noise (Chapter 9 of the ESA)

Following their review of the implications of the erroneous data in the TAA, STAL’s noise consultants Cole Jarman have advised that the only change to the text of this chapter relates to paragraphs 9.73 and 9.74 of the ESA, which would now read:

9.7.3 For the additional assessment of the 2032 Development Case (43mmpa) scenario in comparison with the 2019 Baseline Year, all changes in noise levels are less than 3 dBA apart from on Round Coppice Road for which the change is 3dB. The corresponding impacts are negligible. Again, it is worth

noting that over the long term assessed here, these gradual changes in road traffic noise would not be perceptible.

9.7.4 This is an improvement over the findings of the 2018 ES assessment, as in that case Round Coppice Road was an exception, for which an increase of 3.8 dBA was assessed, effectively constituting a minor impact. The reason for this is that road traffic numbers forecast in the 2018 ES were slightly higher for 2028 DC than those forecast in this ESA for 2032 DC, while baseline year numbers were lower for 2016 (used in the 2018 ES) than for 2019 (used for this ESA). As a result, the road traffic noise level difference between full capacity design year and baseline year conditions are ~~4.0dB~~ 0.8 dB lower for this ESA compared to the 2018 ES. **For the reasons set out in paras.9.49 and 9.50 of 2018 ES Chapter 9,** corresponding impacts at all locations are negligible. ~~The scale of impact accordingly reduces from minor to negligible.~~

This change is not significant in regard to the overall conclusions in the ESA as the surface access noise impacts of the proposed development remain negligible.

Air Quality (Chapter 10 of the ESA)

Having considered the implications of the erroneous transposition of the airport passenger flows between the A120 West (W) and A120 East (E) directions, STAL's air quality consultants, Arup, has advised the following:

The data inputting error only affects traffic flows along the A120. The ESA has assessed higher traffic flows (and therefore emissions) on the A120 to the west of the airport around Bishop's Stortford. This is the area of most concern for air quality; albeit, there are no changes in the centre of Bishop's Stortford.

The error in the traffic data would result in a reduction in pollutant emissions on the A120 to the west of the airport by up to 2% in 2027 and 3% in 2032 (in the Development Case scenarios). There is a much larger number of receptors in this direction than compared to the A120 E and therefore the traffic error would provide a benefit in air quality predictions at these sensitive receptors.

The ESA assessed lower traffic flows (and therefore emissions) on the A120 E than is now the case. There are few sensitive receptors for air quality in this area, with the closest receptors to the A120 being R174 (Warish Hall Cottage) and R175 (The Old House). The changes in traffic due to the traffic error would result in an increase in pollutant emissions in this location by up to 3% in 2027 and up to 5% in 2032 (in the Development Case scenarios). However, the ESA has predicted concentrations to be under 15µg/m³ for NO₂ (in 2027 and 2032) at the receptors closest to the A120 in this area, under 13µg/m³ for PM₁₀ and under 10µg/m³ for PM_{2.5}. As such, even with the small increase in road traffic emissions on the A120 E, total concentrations would still remain well below the relevant air quality standards.

In view of the above, the error in the traffic data does not materially affect the outcomes of the air quality assessment presented in the ESA.

Other implications to the ESA

RPS, as EIA coordinators and lead author of the ESA, has considered potential implications of this minor error in the TAA on other topics such as socio-economics (Chapter 11) and public health and wellbeing (Chapter 14) and has concluded that there is no requirement to revisit the conclusions of the ESA.

Conclusion

The transposing of the traffic flow figures for the A120 has no material bearing on the conclusions of either the ESA or the TAA.

Annex 1 – Transport Assessment Addendum (TAA) Replacement Chapter 7

Stansted Airport 35+ Project



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7 Highway Impact Assessment

Introduction

- 7.1 This chapter provides updated figures for the surface access travel demand and impact upon the strategic and local highway network. The assessment methodology undertaken as part of the 2018 TA remains unchanged.
- 7.2 The updates to this chapter include:
- Baseline traffic flows: updated from 2016 to 2019. As per Chapters 4 and 6, the origin-destination of passenger and employee vehicle destinations have been updated based on the 2019 CAA passenger survey and 2019 Employee Survey provided home addresses;
 - Mode share proportions have been updated in accordance with 2019 CAA passenger survey and 2019 Employee Survey responses; and
 - Vehicle occupancy has been updated in accordance with the 2019 CAA passenger survey and 2019 Employee Survey responses. The CAA passenger survey methodology for obtaining the car occupancy factor has been updated to exclude 'Group 0' responses, which represent blank survey responses, and are not a reliable indicator of group size and vehicle occupancy.

Methodology

Data sources

- 7.3 The extent of this traffic impact has been calculated based on the following:
- **Traffic Survey Data:** Daily observed traffic flows have been derived from the following sources and have been factored up to a common 2019 baseline to better understand the existing traffic conditions within the local highway network:
 - Highway England TRIS data traffic counts have been used for AADT 2018 baseline data for A120 West and East of the Airport and for M11 north and south of J8.
 - Ft traffic count database (www.dft.gov.uk/traffic-counts) – used to provide a more detailed and reliable breakdown of vehicle types to complement the TRIS data.
 - February 2020 on-airport road ATC and MCC traffic surveys supplied by Traci.
 - **Mode Shares:** The latest passenger survey carried out by the CAA (2019) was interrogated to establish the existing mode share for air passenger trips. The 2019 Employee Survey was used to establish employee mode shares.
 - **Vehicle Occupancy:** A car occupancy of 1.97 was applied to car passengers based on the outputs from the 2019 CAA passenger survey.
 - **Place of Origin:** Passenger and Employee place of origin has been used to inform the assignment of vehicle trips to the strategic and local highway network. This information was derived from passenger origin-destination data from STAL (2019) and the 2019 Employee Survey.

7.4 The data above helps to provide a robust representation of existing and future traffic flows. In order to assess the relative impact of the proposed application compared to existing and consented conditions, analysis has been undertaken for each of the assessment scenarios:

- **2019 Baseline** – This reflects existing traffic conditions around Stansted Airport.
- **2032 Do Minimum (35mppa) Scenario** – An assessment of traffic impact assuming the existing passenger cap of 35mppa remains in place.
- **2032 Development Case (43mppa) Scenario** – The same assessment year, but with 43mppa.

Traffic Growth

7.5 Table 7.1 sets out the revised TEMPro V7.2 growth factors which have been applied to the various data sources to predict future traffic levels.

Table 7.1: TEMPro v7.2 Growth Factors

Growth Years	TEMPro V7.2 Growth Factor
2016 to 2020*	1.0637
2017 to 2020	1.0470
2018 to 2020	1.0299
2019 to 2020	1.1052
2017 to 2032	1.1952
2018 to 2032	1.1777
2019 to 2032	1.1606
2020 to 2032	1.1441
2020 to 2027	1.1032

*All TEMPro baseline traffic analysis was uplifted to 2020 to match the 2020 Tracsis traffic survey outputs. As these were undertaken in February 2020, adopting these as a 2019 baseline is robust.

Daily Traffic Flows

7.6 The AM and PM peak hours on the highway network were previously agreed as set out in Table 7.2 below:

Table 7.2: Peak Surface Access Airport Arrivals and Departures

Assessment Scenario	Peak Airport Traffic
2019 Existing Baseline	17:00-18:00
2032 Do Minimum (35mppa)	16:00-17:00
2032 Development Case (43mppa)	16:00-17:00

Car Occupancy Factor

7.7 In order to calculate individual vehicle trips a car occupancy factor has been derived from the 2019 CAA passenger survey. This sets out the proportion of persons travelling in private cars by group size. All respondents who answered '0' as their group size represent have been removed from the analysis. This meant that the passenger surveyed left the answer blank and the accurate group size cannot be determined. A group size of '1' is representative of the passenger surveyed, a group size of '2' is representative of the passenger surveyed plus one additional car passenger and so on.

7.8 The proportion of car driver and car passenger trips (including taxi/rental) have been factored to obtain the number of vehicle trips per location by the following factors:

- Car Driver Trips: Division by a Factor of 1.
- Car Passenger Trips: Division by a Factor of 1.97.

Air Passenger Distribution

- 7.9 A place of origin/destination has been determined for the passenger trips made to and from the airport. As this was not obtainable for foreign passengers, the total passenger trips have been broken down by the UK residences supplied by STAL based on 2019 survey data. This has been aggregated with ICF supplied passenger forecasts.
- 7.10 The updated proportion of daily vehicle trips for passengers per scenario is presented in Table 7.3.

Table 7.3: Air Passenger Origin and Total Daily Vehicle Trips per Scenario

Residence	2019 Existing Baseline	2032 Do Minimum (35mppa)	2032 Development Case (43mppa)
Inner London	1,957	2,423	2,977
Outer London NE	1,879	2,326	2,858
Outer London SE	290	359	441
Outer London SW	415	513	631
Outer London NW	1,709	2,115	2,599
Outer South East NE	6,735	8,337	10,243
Outer South East NW	1,609	1,992	2,447
Outer South East SW	780	965	1,186
Outer South East SE	1,425	1,764	2,167
Southwest & Wales	851	1,053	1,294
West Midlands	492	609	748
East Midlands	1,641	2,032	2,496
East Anglia	5,299	6,559	8,058
Rest of UK	639	791	972
Residence not reported	0	0	0
Foreign	0	0	0
Total	25,721	31,840	39,117

Any discrepancies are due to rounding.

Road Assignment

- 7.11 The assignment of trips to the highway network has been updated in line with the new data as shown in Table 7.4.

Table 7.4: Assignment of Air Passenger Vehicles to Road Network

Road	Proportion of Total Passengers (%)
M11 North of J8	29%
M11 South of J8	52%
A120 East of J8	13%
A120 West of J8	6%
Total	100%

Employee Distribution

- 7.12 Baseline place of origin and employee mode shares were derived from the 2019 Employee Travel Survey. The assumptions made for passenger car occupancy (1.038 persons per vehicle

for car passengers) were also used for employee trips. Employee place of residence is assumed to remain broadly unchanged. Table 7.5 illustrates the number of vehicle trips anticipated per day, per place of origin and assessment scenario.

Table 7.5: Employee Origin and Vehicle Trips per Scenario

Residence	Baseline 2019	2032 Do Minimum (35mppa)	2032 Development Case (43mppa)
Inner London	110	106	130
Outer London NE	462	423	519
Outer London SE	15	13	16
Outer London SW	19	16	20
Outer London NW	172	153	187
Outer South East NE	5,882	5,424	6,645
Outer South East NW	50	43	52
Outer South East SW	15	13	16
Outer South East SE	30	32	39
Southwest & Wales	8	7	8
West Midlands	8	7	8
East Midlands	92	79	96
East Anglia	556	486	594
Rest of UK	12	10	12
Residence not reported	0	0	0
Foreign	0	0	0
Total	7,431	6,810	8,342

Any discrepancies are due to rounding.

7.13 The vehicle trips presented in Table 7.5 have been assigned to the road network in accordance with the methodology used for passenger trips. The results are shown in Table 7.6.

Table 7.6: Assignment of Employee Vehicles to Road Network

Road	Proportion of Total Employees
M11 North of J8	7%
Church Road	13%
A120 East of J8	32%
Parsonage Road	2%
A1250	4%
M11 South of J8	23%
A120 West of J8	13%
Bury Lodge Lane	6%
Total	100%

Any discrepancies are due to rounding.

7.14 Table 7.6 illustrates that the highest proportion of vehicle trips are anticipated from the east, along the A120 (33%). A small proportion of trips (2-7%) are derived from Bury Lodge Lane and Parsonage Road.

Highway Impact Analysis

Daily link Flows

- 7.15 Traffic analysis was undertaken for 2019 and the 2032 assessment years using the passenger and employee information set out above, to determine the impact of the proposed development on the local road network. Figure 7.1 shows the 2019 Existing Baseline daily traffic flows for the strategic study area. Figure 7.2 shows the percentage increase in traffic growth on the highway network between the 2019 Existing Baseline and 2032 Do Minimum (35mppa) scenario.
- 7.16 Figure 7.2 shows the future Do Minimum scenario, the increase in traffic flows arise both from the Airport growth and as a result of background growth in traffic. With the exception of roads immediately feeding the airport, the majority of the increase from the 2019 Baseline relates to the background growth. The highest increase close to the airport is the 68.8% increase in daily traffic predicted on Round Coppice Road.
- 7.17 Figure 7.3 shows a comparison in daily traffic flows between the 2032 Do Minimum (35mppa) scenario and the 2032 Development Case (43mppa) to determine the additional impact of an increase in passengers from 35mppa to 43mppa. The largest increases in daily vehicle flows are predicted for the roads nearest the airport. Thremhall Avenue is predicted to increase by ~~21.2%~~22.4%; the link towards Stansted services to increase by ~~12.9%~~8.6%; and the A120 (east of Junction 8) by ~~8.8%~~9.4%.
- 7.18 None of the predicted future year daily flows exceed the capacity of the individual links and no upgrades have been identified as being necessary to cater for the predicted increases. Full calculations and analysis are provided in **Appendix A**.

Figure 7.1: 2019 Existing Baseline AADT Flows

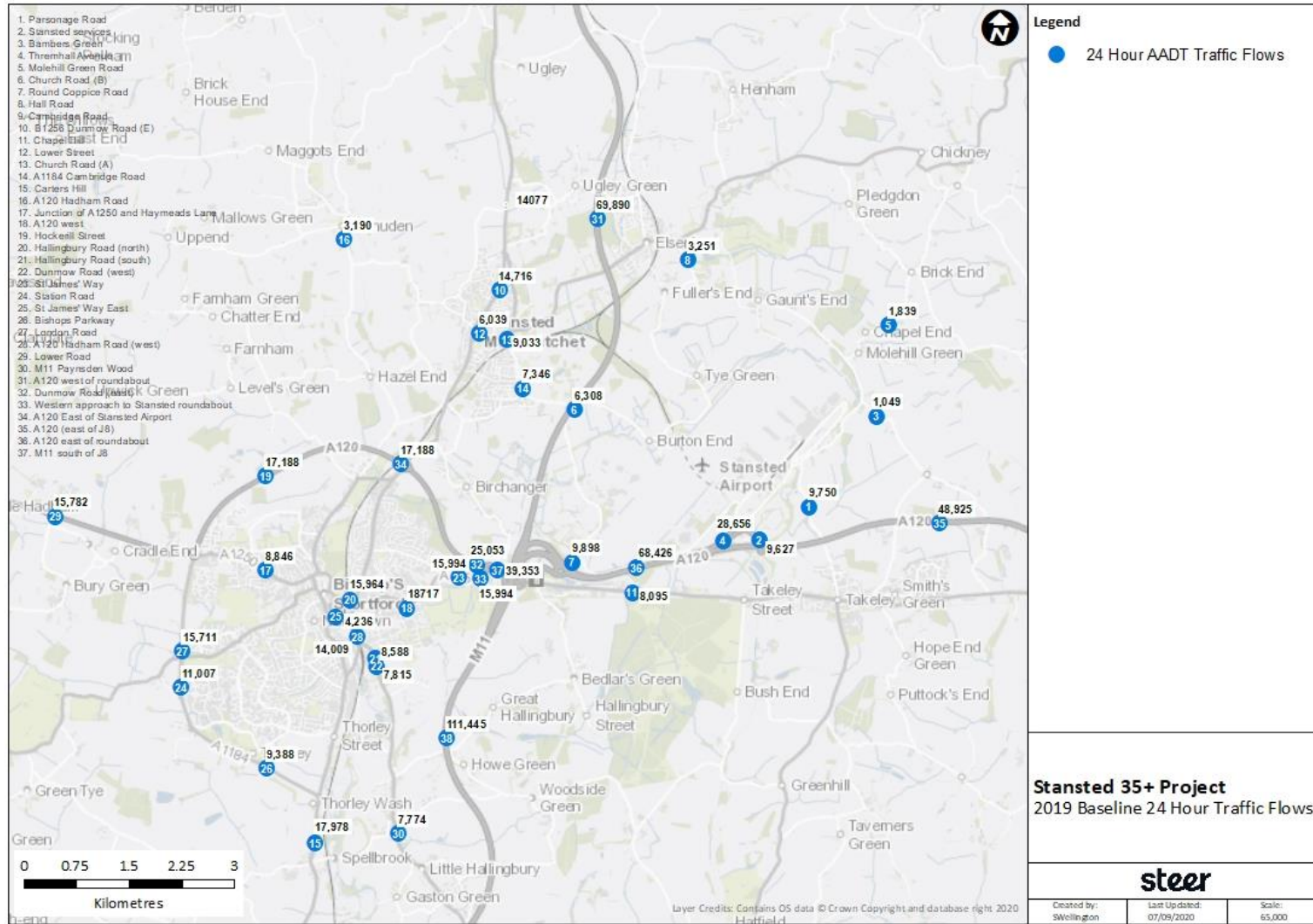


Figure 7.2: Percentage Traffic Increase between 2019 Existing Baseline and 2032 Do Minimum (35mppa) Scenario

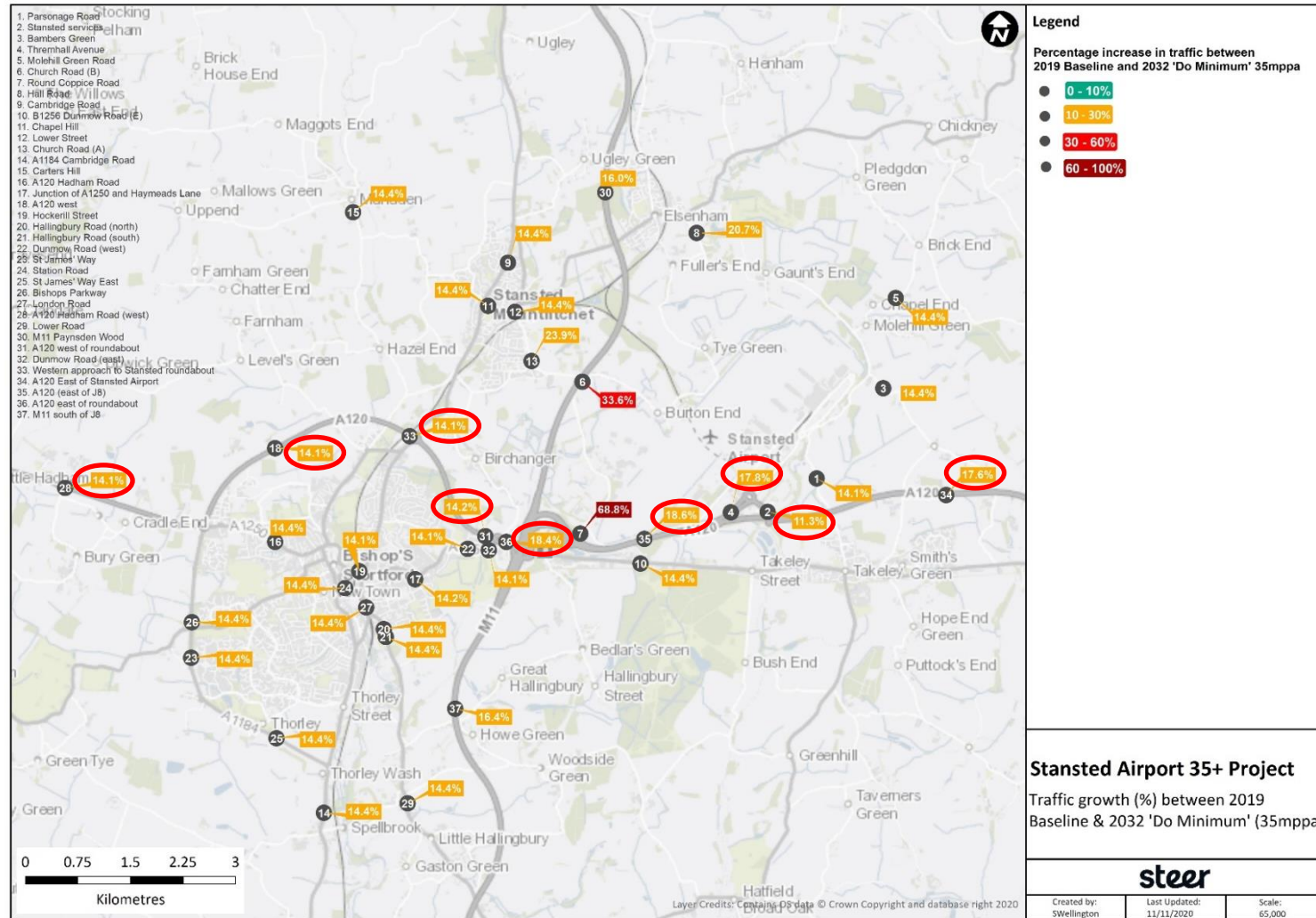
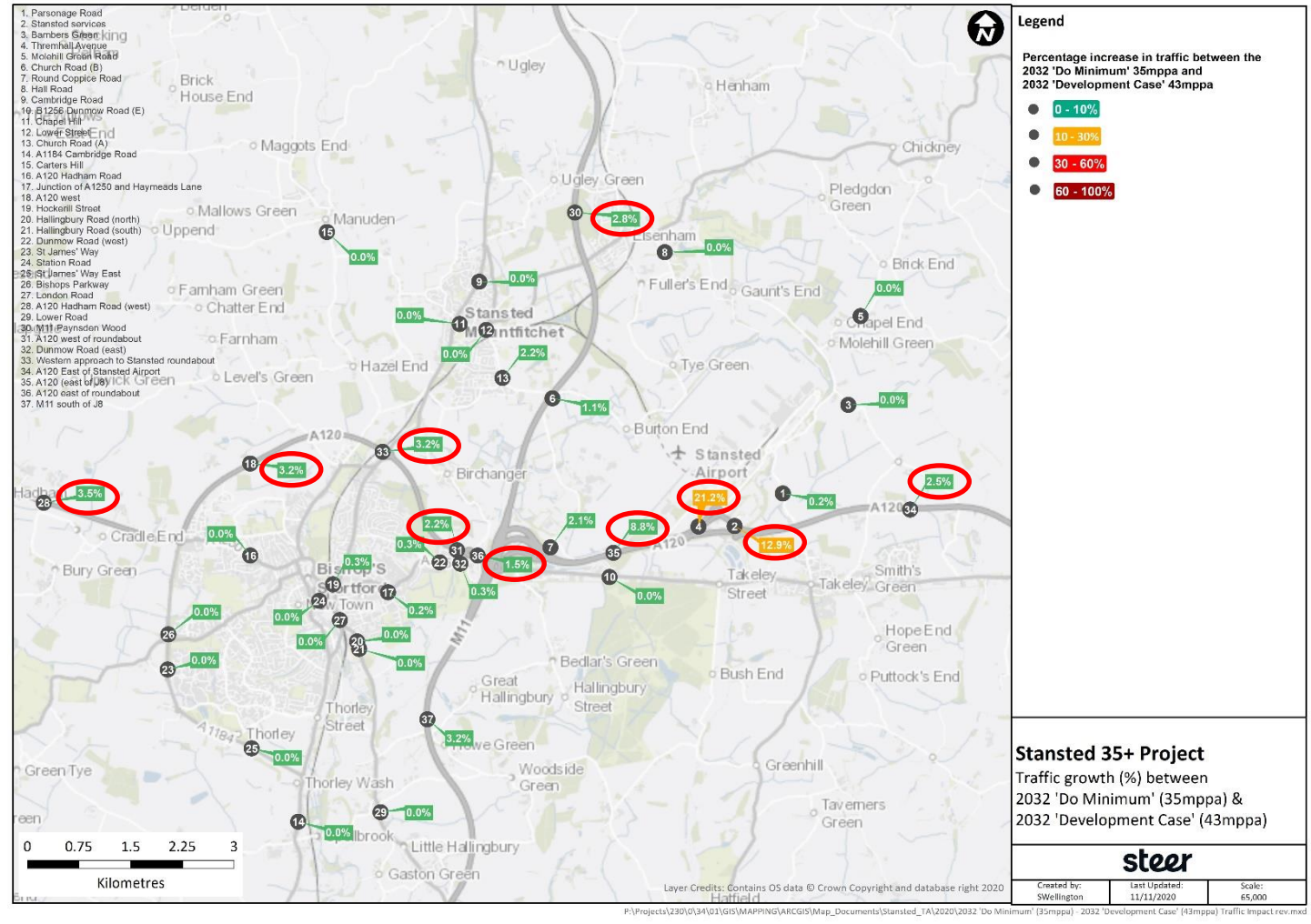


Figure 7.3: Percentage Traffic Increase between 2032 Do Minimum (35mppa) Scenario and 2032 Development Case (43mppa) Scenario



Highway Network: Peak Hour Analysis

7.19 Table 7.7 sets out the assignment of two-way trips for the AM peak period (07:00-08:00) for the three scenarios:

- 2019 Existing baseline;
- 2032 Do Minimum (35mppa); and
- 2032 Development Case (43mppa).

Table 7.7: Traffic Impact – AM Network Peak (07:00-08:00)

Link	2019 Existing Baseline	2032 (35mppa)	% Increase (2019 to 2032 35mppa)	2032 (43mppa)	% Increase (2032 35mppa to 2032 43mppa)
Parsonage Road	586	676	15.4%	677	0.1%
Stansted services	579	705	21.8%	738	4.7%
Bamber's Green	63	72	14.3%	72	0.0%
Thremhall Avenue	1,723	2,211	28.3%	2,494	12.8%
Molehill Green Road	111	127	14.4%	127	0.0%
Church Road (B)	379	457	20.6%	462	1.1%
Round Coppice Road	595	1,098	84.5%	1,107	0.8%
Hall Road	195	224	14.9%	224	0.0%
A120 (east of Stansted Airport)	2,943	3,515	19.4%	3,571	1.6%
A120 (east of M11 J8)	4,115	5,076	23.4%	5,359	5.6%

7.20 For the AM peak, as a result of background growth and the increased airport activity between the 2019 baseline and the 2032 Do Minimum (35mppa) scenarios, traffic is predicted to grow in the range of 14.3% and 84.5%. The highest increase being on Round Coppice Road (mainly associated with the traffic predicted to arise from the employment development at Northside).

7.21 In comparison, the predicted additional increase in AM peak traffic flows for the 2032 Development Case (43mppa) is experienced on Thremhall Avenue with an uplift of 12.8% of traffic compared to the 2032 Do Minimum (35mppa) scenario. All other links in the network have less than a 6% increase in traffic, and in some cases, no change. The higher growth on Thremhall Avenue is to be expected as this forms the main access route for passenger traffic to and from the terminal and associated car parks.

7.22 The same analysis was undertaken for the PM highway network peak (17:00-18:00) and the results are presented in Table 7.8.

Table 7.8: Traffic Impact – PM Network Peak (17:00-18:00)

Link	2019	2032 (35mppa)	% Increase (2019 to 2032 35mppa)	2032 (43mppa)	% Increase (2032 35mppa to 2032 43mppa)
Parsonage Road	728	838	15.1%	840	0.2%
Stansted services	719	684 760	-4.9% 5.7%	761 797	11.3% 4.9%
Bamber's Green	78	90	15.4%	90	0.0%
Thremhall Avenue	2,141	2,112 2,244	-1.4% 4.8%	2,726 2,897	29.1%
Molehill Green Road	137	157	14.6%	157	0.0%
Church Road (B)	471	560	18.9%	569	1.6%
Round Coppice Road	739	1,257 1,490	70.16 1.0%	1,280 1,43	1.89 %
Hall Road	243	278	14.4%	278	0.0%
A120 (east of Stansted Airport)	3,655	4,129 4,199	13.0% 14.9%	4,244 4,273	2.8% 1.8%
A120 (east of M11 J8)	5,111	4,930 4,921	-3.5% -3.7%	5,544 5,575	12.5% 13.3%

7.23 For the PM peak hour, traffic is predicted to grow in the range of 0% and 70.161% between the baseline and the 2032 Do Minimum (35mppa) scenarios. The highest increase is again on Round Coppice Road (mainly associated with the traffic predicted to arise from the employment development at Northside and Harlow College).

7.24 In comparison, the predicted additional increase in PM peak traffic flows for the 2032 Development Case (43mppa) is experienced on Thremhall Avenue with an uplift of 29.1% of traffic compared to the 2032 Do Minimum (35mppa) scenario.

7.25 The additional overall impact of the proposed development (2032 Development Case (43mppa) is significantly less than the change from the baseline condition to the 2032 Do Minimum (35mppa) scenario.

Highway Network: Peak Hour Junction Impacts

Highway Network AM Peak

7.26 The percentage increase in traffic between the 2032 Do Minimum (35mppa) and the 2032 Development Case (43mppa) scenarios is shown in Table 7.9.

Table 7.9: Percentage Increase in Junction Link Traffic Flows (07:00-08:00)

Road Link	% Increase	
	2019 Baseline to 2032 35mppa	2032 35mppa to 2032 43mppa
M11 Junction 8 Motorway Services	28%	4%
A120 West (Bishop's Stortford Bypass)	31%	1%
M11 North of Junction 8	29%	1%
A120 East of Junction 8	34% 35%	4%
B1256 Dunmow Road	27%	0%
M11 South of Junction 8	31%	2%
Priory Wood West	39% 35%	1%
Priory Wood East	15%	0%
Round Coppice Road South	50% 48%	1%
Long Border Road	14%	0%
Round Coppice Road North	36% 33%	1%

7.27 As Table 7.9 displays, the percentage increase in traffic between the 2019 Existing Baseline and 2032 Do Minimum (35mppa) scenario is significant, with 3935% growth in traffic on Priory Wood West, and 34% growth on the A120 East of Junction 8, 36% growth on Round Coppice Road North and 5048% growth on Round Coppice Road South. Full calculations are provided at **Appendix B**.

7.28 In comparison, the percentage growth in traffic between the 2032 Do Minimum (35mppa) and the 2032 Development Case (43mppa) scenarios is minor, with less than 5% impact experienced on all links assessed. Relative to the percentage increase between the 2019 Existing Baseline and 2032 Do Minimum (35mppa) scenario, the proposed development is anticipated to have a minimal impact on junction link flows.

Highway Network PM Peak

7.29 Table 7.10 sets out the inbound traffic flows for the various entry points to M11 Junction 8 for the alternative scenarios for the PM network peak (17:00-18:00).

Table 7.10: 17:00-18:00 Junction Flow Analysis

Road Link	2019 Existing Baseline		2032 Do Minimum (35mppa)		2032 Development Case (43mppa)	
	To	From	To	From	To	From
M11 Junction 8 Motorway Services	438	426	503500	490487	528527	514542
A120 West (Bishop’s Stortford Bypass)	1,905	1,838	2,4512,402	2,3332,286	2,4882,460	2,3532,328
M11 North of Junction 8	2,789	2,867	3,340	3,445	3,439	3,542
A120 East of Junction 8	1,708	1,375	1,9681,948	1,5321,481	2,0872,059	1,6961,664
B1256 Dunmow Road	620	642	788	816	788	816
M11 South of Junction 8	2,311	2,622	2,560	2,985	2,741	3,157
Priory Wood West	133	142	192175	185168	198181	192174
Priory Wood East	1,380	1,763	1,5911,588	2,0152,012	1,5921,589	2,0252,021
Round Coppice Road South	533	357	682647	598565	703668	610577
Long Border Road	219	153	251	176	251	176
Round Coppice Road North	536	428	652617	605572	673638	616583

7.30 The percentage increase in traffic between the 2019 Existing Baseline and the 2032 Do Minimum (35mppa) scenario, and the percentage change between the 2032 Do Minimum (35mppa) and the 2032 Development Case (43mppa) scenarios are presented in Table 7.11.

Table 7.11: Percentage Increase in Junction Link Traffic Flows (17:00-18:00)

Road Link	% Increase	
	2019 Baseline to 2032 35mppa	2032 35mppa to 2032 43mppa
M11 Junction 8 Motorway Services	15%14%	5%
A120 West (Bishop’s Stortford Bypass)	28%25%	1%2%
M11 North of Junction 8	20%	3%
A120 East of Junction 8	14%10%	8%10%
B1256 Dunmow Road	27%	0%
M11 South of Junction 8	12%	6%
Priory Wood West	3725%	3%
Priory Wood East	15%	0%
Round Coppice Road South	4436%	3%

Long Border Road	14%	0%
Round Coppice Road North	30.23%	3%

7.31 Table 7.11 illustrates that a significant growth in traffic is generated between the 2019 Existing Baseline and the 2032 Do Minimum (35mppa) scenario, with up to 36% growth in traffic experienced on Round Coppice Road South and over 20% growth on Round Coppice Road North, [Round Coppice Road South](#), Priory Wood West, A120 West (Bishop’s Stortford Bypass) and B1256 Dunmow Road.

7.32 In comparison, the percentage growth in traffic between the 2032 Do Minimum (35mppa) and the 2032 Development Case (43mppa) scenarios is considerably less. A maximum ~~8%~~**10%** impact is experienced on the A120, East of Junction 8.

Airport Peak Hour Analysis

Airport Peak

7.33 As previously set out, the operations at the airport result in unique peak periods that differ from normal observed highway peak periods. The airport peak hours have been identified from the ‘busy day’ passenger movement schedules for the airport and indicate that the peak hour for two-way air passenger and employee surface vehicle trips is expected to shift from 17:00-18:00 in 2019 to 16:00-17:00 in 2032 for both the 2032 Do Minimum (35mppa) and 2032 Development Case (43mppa) scenarios.

7.34 The time interval of 16:00-17:00 has therefore been selected to compare and analyse the impact upon local traffic conditions as a result of the change from the 2032 Do Minimum (35mppa) and the 2032 Development Case (43mppa) scenarios. The two-way results are presented in Table 7.12.

Table 7.12: Traffic Impact – Airport PM Peak (16:00-17:00)

Link	2019	2032 Do Minimum (35mppa)	% Increase (2019 to 2032 35mppa)	2032 Development Case (43mppa)	% Increase (2032 35mppa to 2032 43mppa)
Parsonage Road	745	857	15.0%	859	0.2%
Stansted services	735738	840844	13.8% 14.4%	920882	9.5% 4.5%
Bamber’s Green	80	92	15.0%	92	0.0%
Thremhall Avenue	2,188	2,4212,473	10.6% 13.0%	3,0413,134	25.6% 26.7%
Molehill Green Road	140	161	15.0%	161	0.0%
Church Road (B)	482	575	19.3%	583	1.4%
Round Coppice Road	756	1,306249	72.8% 65.2%	1,329273	1.8% 9%
Hall Road	248	284	14.5%	284	0.0%
A120 (east of Stansted Airport)	3,736	4,3804,376	17.2% 17.1%	4,4974,451	2.7% 1.7%
A120 (east of M11 J8)	5,225	6,0246,076	15.3% 16.3%	6,6436,737	10.3% 10.9%

7.35 Table 7.12 illustrates that the growth in traffic between the 2019 Existing Baseline scenario and the 2032 Do Minimum (35mppa) scenario is significant, due to a shift in peak surface departures to 16:00-17:00 in the future scenarios. A maximum ~~72.8%~~**65.2%** growth in traffic is experienced on Round Coppice Road, a result of existing low traffic volumes and the future Northside development (accessed from Round Coppice Road) and increased airport travel. Despite high percentage increases, absolute traffic volumes remain low and the growth in traffic is not anticipated to impact upon the road’s operation.

7.36 In comparison, the highest impact on AM peak traffic flows in the 2032 Development Case (43mppa) is experienced on Thremhall Avenue with an uplift of ~~25.6%~~26.7% of traffic compared to the 2032 Do Minimum (35mppa) scenario. Additional traffic growth associated with the increase to the 2032 Development Case (43mppa) from the 2032 Do additional Minimum (35mppa) scenario is small (<11%).

Local Road Impact Assessment

7.37 Updated analysis of the potential combined local catchments that could be anticipated to access the airport via Parsonage Road and Bury Lodge Lane in combination has been undertaken using GIS.

7.38 The resultant total anticipated traffic movement for 2019, 2032 Do Minimum and the 2032 Development Case is shown in Table 7.13.

Table 7.13: Annual Average Daily Total Car Trips on Local Roads

	Mole Hill Green		Great Dunmow - B1256 immediately east of A120		Takeley - Parsonage Road immediately north of B1256		Elsenham - Hall Road immediately south of B1051		Stansted Mountfitchet - Church Road immediately east of b1051		Bury Lodge Road & Coopers End roundabout	
	Passengers	Employees	Passengers	Employees	Passengers	Employees	Passengers	Employees	Passengers	Employees	Passengers	Employees
Current Airport	86	194	20	124	28	145	4	27	22	138	125	402
35mppa	107	178	24	115	35	134	5	25	27	128	154	371
43mppa	131	218	30	141	43	165	7	31	33	157	189	454
Current Airport	280		144		174		32		160		527	
35mppa combined	284		139		170		31		155		525	
43mppa combined	349		171		208		37		190		644	
35mppa - 43mppa impact	64		32		38		7		35		119	

7.39 The calculated daily total impacts have then been considered in the context of current traffic levels as set out in Table 7.14.

Table 7.14: Local Road AADT and Impacts

	Mole Hill Green	Great Dunmow - B1256 immediately east of A120	Takeley - Parsonage Road immediately north of B1256	Elsenham - Hall Road immediately south of B1051	Stansted Mountfitchet - Church Road immediately east of B1051	Bury Lodge Road & Coopers End roundabout
Current Background	1,839	8,095	9,750	3,251	7,346	6,308
Current Airport	280	144	174	32	160	527
Background Growth to 2028	190	835	993	335	659	604
35mppa Demand	284	139	170	31	155	525
2032 35mppa AADT	2,314	9,070	10,914	3,617	8,161	7,437
43mppa Demand	349	171	208	37	190	644
35-43mppa	64	32	38	7	35	119
2032 43mppa AADT	2378	9,101	10,952	3,623	8,196	7,556
35-43mpaa impact	2.78%	0.35%	0.35%	0.19%	0.43%	1.60%

M11 Junction 8

- 7.40 Agreement was reached in 2017 with Highways England and Essex County Council on a package of highways measures that would provide mitigation for the impact of additional trips associated with the 35+ proposals. These improvements (the “interim plus works”) were designed to be compatible with a M11 Junction 8 / A120 / A1250 scheme- termed the “Interim Measures” that were planned for implementation starting in 2019/20. These works are as yet to be started.
- 7.41 The agreed terms for the planning agreement to cover the mitigation measures allowed for an option whereby the cost of these works would be paid to help deliver an “alternative major scheme” should that be determined appropriate by the highway authorities. This alternative approach remains open.
- 7.42 Subsequent recent discussions with the two highway authorities have considered the scenario whereby the interim scheme is not implemented, and no alternative major scheme is coming forward. It has been agreed that it would be beneficial to identify a series of measures that mitigates the impact of the additional traffic associated with the 35+ traffic that could be delivered as modifications to the current layout. These works are likely to be a combination of previous unimplemented elements of the G1 scheme (contained in the 2008 S106) and additional improvements along the lines of the “interim plus” works previously identified and is likely to include elements such as:
- M11 NB Off-slip- extend the righthand flare (lane 4) of the M11 Off-slip
 - Add an extra lane to the service station exit;
 - Change lane allocation to allow three exit lanes from main carriageway;
 - Extend A120 entry lane flare and change lane allocation;
 - An additional lane on the M11 On-slip, connected to lane 3 of the circulating carriageway;
 - Downstream merge to bring the three lanes down to the existing two;

- M11 SB Off-slip- extend lane 2 of the Off-slip back to the bridge on the approach;
- A120 East Junction- Added extra lane to Dunmow Road, with downstream merge; and / or
- M11 Southbound On-slip- add additional lane to circulating carriageway (on the “cut through”) for traffic heading for the M11 Southbound On-slip

Once a suitable package is identified, these highways works could be delivered as an alternative to the “interim plus” works in line with the 2008 section 106 agreement.

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