



**NOTTINGHAMSHIRE**  
**Fire & Rescue Service**  
*Creating Safer Communities*

Nottinghamshire and City of Nottingham  
Fire and Rescue Authority

# **EVALUATION OF THE CENTRAL FIRE STATION RELOCATION TO LONDON ROAD**

Report of the Chief Fire Officer

**Date:** 26 February 2021

**Purpose of Report:**

To present Members with the outcomes from the evaluation of the relocation of Central Fire Station to London Road.

**Recommendations:**

It is recommended that Members:

- Note the content of this report.
- Receive updates on the full integrated risk management planning process during the 2021/22 year.

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## 1. BACKGROUND

- 1.1 This evaluation report is presented as an interim report which will, along with updated data, be incorporated in to the Service-wide assessment for the integrated risk management planning process in 2021. This will be presented to Members later in the 2021/22 business year.
- 1.2 Nottinghamshire Fire and Rescue Service (NFRS) had a fire station located on Shakespeare Street, Nottingham, named 'Central Fire Station', since the 1940s. The Central Fire Station site was a shared building with Nottinghamshire Police and Nottingham City Council.
- 1.3 Due to projected future running costs of this site and an assessment that this site was not optimal as a location in the longer term, additional locations for this fire station were considered.
- 1.4 The intention to relocate Central Fire Station was originally outlined in the Integrated Risk Management Plan (IRMP) in 2004.
- 1.5 As part of the 2010 Fire Cover Review (FCR), the Service evaluated the provision of emergency cover in the city centre. This review used historic incident data and modelling to assess potential sites for a new station that would provide an effective emergency response to the city area. The review identified the London Road area as a suitable location.
- 1.6 The Fire Authority passed the recommendation to relocate Central Fire Station to London Road on 16 December 2011.
- 1.7 The move from Central Fire Station to London Road was undertaken on 13 September 2016.
- 1.8 Central Fire Station was crewed with two, wholetime staffed, fire appliances and a wholetime staffed, Aerial ladder Platform (ALP). All three vehicles moved to the new location at London Road.
- 1.9 In 2019, as part of a 2019-2022 Strategic Plan commitment to '*undertake a Fire Cover Review*', the Chief Fire Officer commissioned an evaluation report to look at the impact of moving the city fire station from Shakespeare Street to London Road.

## 2. REPORT

- 2.1. The primary focus of the review was to evaluate the impact on emergency response times associated with moving the fire station from Shakespeare Street to London Road, however, the review also incorporates a review of prevention activities undertaken in the city area, and financial outputs for the relocation.

- 2.2 The evaluation uses a variety of data sets, such as historical incident data, and GIS and workload modelling to quantify the impact on operational response. Comparative date ranges were also set 'pre' and 'post' station move to compare data. Further information on the methodology of analysis can be referenced within the full evaluation report attached at Appendix A.
- 2.3 In summary, the review identifies that the Service is still meeting its response standard, to respond to incidents within an average of eight minutes, from the new location on London Road. (The Service has a public commitment to respond to incidents within eight minutes, on average, as detailed in the Strategic Plan 2019-2022. Response time is defined as the point of mobilisation to time of arrival at the incident.)
- 2.4 Modelled data shows that there has been an increase in the average attendance times to 'life-risk' primary fires, on average, of six seconds (an increase from 7 minutes 30 seconds to 7 minutes 36 seconds).
- 2.5 Historical data shows that attendance times, on average, have risen by 30 seconds, to incidents within 'high-risk' areas across the city (an increase from 6 minutes 42 seconds to 7 minutes 12 seconds). The 'high risk' category defines those areas within the County that are the most at risk as determined by the risk scoring system detailed in Appendix 15 of the attached evaluation report.
- 2.6 More focused analysis, through modelling, shows that some 'high-risk' areas now have an increased response time of more than one minute. These areas are detailed within the report.
- 2.7 A review of both modelled and historical data shows that since the move to London Road there has been an increase in incident mobilisations for Stockhill and Arnold fire stations, and a decrease in mobilisations for West Bridgford, Carlton and Highfields.
- 2.8 Historical data shows that appliances at Central were mobilised to 5878 incidents in a two-year period (12/09/2014 and 11/09/2016). This represented 21.7% of total mobilisations for the Service over this period.
- 2.9 In comparison, since the move to London Road, between the two-year period of 14/09/16 to 13/09/18, appliances were mobilised to 5422 incidents. This represents 18.3% of the total mobilisations for the Service during this period.
- 2.10 Modelled data shows the move to London Road has led to an increase in the Service's overall average attendance, to all incidents, of six seconds (increase from 7:30 to 7:36) – the same increase as reported against attendance at 'life-risk' primary fire incidents.
- 2.11 The move from Central to London Road has had an impact on Stockhill fire station with a modelled 16% increase in attendances, which equates to 324 additional mobilisations per year. It is also reported that Arnold fire station has seen a modelled increase of 4% in attendances, equating to a rise of 44 additional mobilisations per year.

- 2.12 The Service has a focus on increasing proactive prevention activities under the '*Safer Communities Strategy*'. The ambition of prevention activities is to stop fires, and other emergencies, from occurring and to target those who are most vulnerable and 'at risk' in our communities.
- 2.13 With the changes to how lower super output areas (LSOAs) are reported in 2015, it is not possible to directly compare prevention activities from before and after the move to London Road station. However, the report highlights that key prevention activities undertaken by the Service have increased progressively in recent years.
- 2.14 One of the Service's primary prevention activities is safe and well visits (SWVs). The report highlights that there has been a steady increase in the number of SWVs in the city of Nottingham, each year, since 2013.
- 2.15 The report also highlights that there has been an increase in the number of SWVs being carried out in 'high risk' areas. SWVs in high risk areas within the City of Nottingham account for approximately 53% of all the total number of SWVs undertaken by the Service.
- 2.16 Prevention activities additional to SWVs, such as safety campaigns, have also seen a progressive increase across the City since 2015.
- 2.17 There has also been an increase in the number of prevention activities being undertaken in high risk areas. Prevention activities in high risk areas within the City of Nottingham accounts for approximately 47% of all the total within the County.
- 2.18 The London Road site was developed with capacity to accommodate the Local Authority Emergency Planning Team who occupy the top floor of the building. Additionally, both East Midlands Ambulance Service and Nottinghamshire Police have accommodation within the premises, making the station a true, collaborative site.

### **3. FINANCIAL IMPLICATIONS**

- 3.1 The overall budget for the relocation project was detailed at £5.0 million in October 2015. The actual cost of the project was £4.4 million; a saving of nearly £600k.
- 3.2 Although the new building at London Road more efficient to run, the annual savings of running costs are less that what was originally expected.
- 3.3 The running costs of the two stations can be directly compared with the average cost of Central station being £151,869 (2013- 2017) against an average of £145,355 for London Road (2016-2020). An efficiency of approximately £6500 per annum.

- 3.4 One of the most notable annual costs for the running of London Road is business rates, currently over £91,000 for 2020/21. The Service is currently undertaking an appeal against the business rates for the London Road site with the Local Authority and the national evaluation office.

#### **4. HUMAN RESOURCES AND LEARNING AND DEVELOPMENT IMPLICATIONS**

There are no human resources or learning and development implications arising from this report.

#### **5. EQUALITIES IMPLICATIONS**

An equality impact assessment has not been undertaken due to the nature of this report.

#### **6. CRIME AND DISORDER IMPLICATIONS**

There are no crime and disorder implications arising from this report.

#### **7. LEGAL IMPLICATIONS**

There are no legal implications arising from this report.

#### **8. RISK MANAGEMENT IMPLICATIONS**

There are no risk management implications arising from this report.

#### **9. COLLABORATION IMPLICATIONS**

The new station at London Road provides collaborative working space for both the Local Authority Emergency Planning Team, the Neighbourhood Policing Team for the Meadows and East Midlands Ambulance Service.

#### **10. RECOMMENDATIONS**

It is recommended that Members:

- 10.1 Note the content of this report.
- 10.2 Receive updates on the full integrated risk management planning process during the 2021/22 year

**11. BACKGROUND PAPERS FOR INSPECTION (OTHER THAN PUBLISHED DOCUMENTS)**

None.

John Buckley  
**CHIEF FIRE OFFICER**



**NOTTINGHAMSHIRE**  
**Fire & Rescue Service**  
*Creating Safer Communities*

# **AN EVALUATION OF THE CENTRAL FIRE STATION MOVE TO LONDON ROAD**

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<b>Version:</b>	V1.2 - (Jan 2021)

# AN EVALUATION OF THE CENTRAL FIRE STATION MOVE TO LONDON ROAD

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## SECTION 1: EXECUTIVE SUMMARY

- 1.1 The Nottingham city fire station, known as 'Central', was relocated from Shakespeare Street to London Road on the 13<sup>th</sup> of September 2016.
- 1.2 The Service's Fire Cover Review 2010 (Sec 1.31) stated that the decision to relocate Central to London Road, based on the risk model used '*would provide excellent access routes into the city, and surrounding areas and will greatly improve response times to those areas of greater risk*'. Although this was modelled some time ago- this report highlights that the expected decrease in attendance times has not been realised.
- 1.3 Since the move to London Road the following high levels findings have been identified:
  - Attendance times have increased. However, the service is still able to meet its response standard, to respond to incidents within an average of eight minutes<sup>1</sup>
  - Modelled data shows that there has been an increase in the average attendance times to 'life-risk' primary fires, on average, by 6 seconds (increase from 7 minutes 30 seconds to 7 minutes 36 seconds)
  - Historical data shows that attendance times, on average, have risen by 30 seconds, to incidents within high-risk areas<sup>2</sup> across the city (increase from 6 minutes 42 seconds to 7 minutes 12 seconds)
  - More focused analysis, through modelling, shows that some high-risk areas now have an increased response time of more than one minute.
  - A review of both modelled and historical data shows that since the move to London Road there has been an increase in incident mobilisations for Stockhill and Arnold fire stations, and a decrease in mobilisations for West Bridgford, Carlton and Highfields.
  - Historical data shows that appliances at Central were mobilised to 5878 incidents in a two-year period (12/09/2014 and 11/09/2016). This represented 21.7% of total mobilisations for the Service over this period. In comparison, since the move to London Road, between the two-year period of 14/09/16 to 13/09/18 London Road appliances were mobilised to 5422 incidents. This represents 18.3% of the total mobilisations for the service during this period.

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<sup>1</sup>The service has a public commitment to respond to incidents within eight minutes, on average. Strategic plan 2019-2022. (Response time is defined as the point of mobilisation to time of arrival at the incident.)

<sup>2</sup> The 'high risk' category defines those areas within the County that are the most at risk as determined by the risk scoring system detailed in appendix 15.

- Modelled data shows the move to London Road has caused an increase in the Service's overall average attendance, to all incidents, of 6 seconds (increase from 7 minutes 30 seconds to 7 minutes 36 seconds) – the same increase as detailed for the average attendance to 'life risk' primary fires.
- 1.4 Although the report has focused on reviewing any changes in the operational response model, it also identifies that there has been a steady increase in the number of Safe and Well visits completed and an increase in wider prevention activity, across the city area, over the review period.
- 1.5 With regards to finance, the report identifies that the total cost of the relocation project was completed at around £600k under budget. Although the expected savings on annual running costs are not being met.

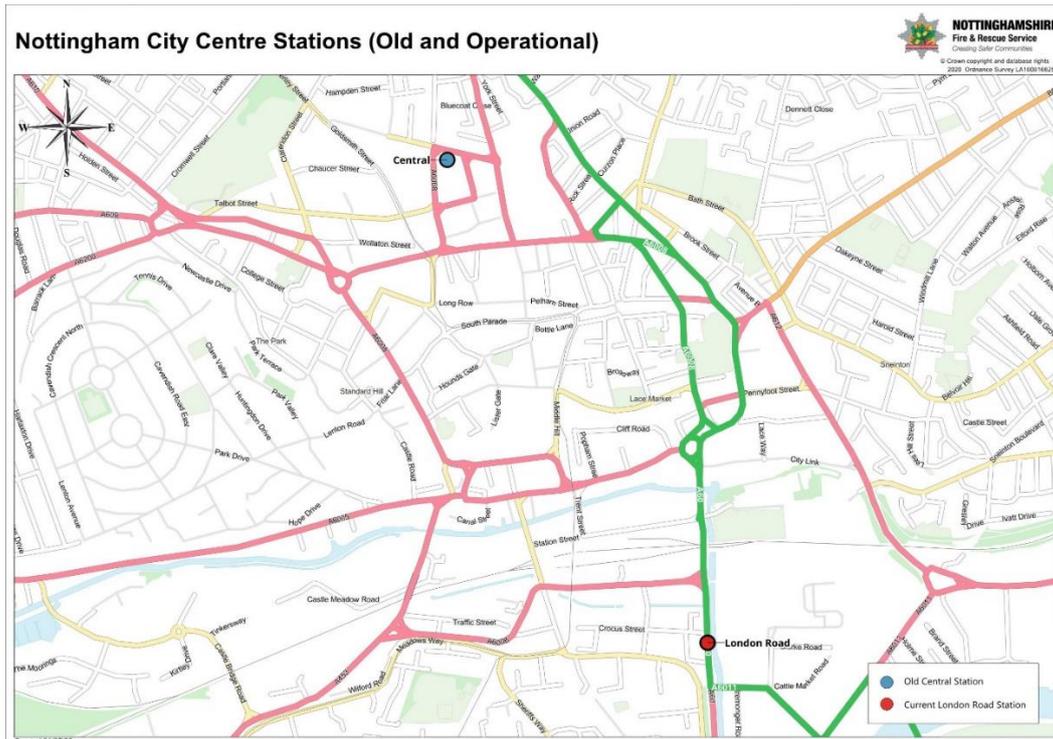
## SCOPE

- 1.6 This report will examine the impact of the relocation of Central fire station from Shakespeare Street to London Road. It will evaluate the change in the operational response model measured by any changes in attendance times to incidents.
- 1.7 Although the focus of the report will be a review of the operational response, a brief review of finance and prevention activity is also included.

## BACKGROUND

- 1.8 The intention to relocate Central Fire Station was originally published in the 2004 Integrated Risk Management Plan (IRMP).
- 1.9 Central Fire Station was a shared building with Nottinghamshire Police and Nottingham City Council. Due to the projected running costs and following an assessment that the building would not be suitable for future operational requirements, the Fire Service along with the Police and City Council moved out of the building.
- 1.10 As part of the 2010 Fire Cover Review (FCR), the Service evaluated the emergency cover provision within the City Centre. This was undertaken with a commitment to provide a suitable operational model in a cost-effective manner.
- 1.11 The 2010 FCR (Section 1.31), identified the location of London Road as an ideal site in respect to the risk model that was applied. The new site on London Road was highlighted as '*providing excellent access to the city centre and surrounding areas and relocating Central station there would greatly improve response times to those areas of greater risk*'.
- 1.12 The Fire Authority approved the recommendation on the 16<sup>th</sup> December 2011 to relocate Central Station to London Road.

- 1.13 The move from Central Station to London Road was undertaken on the 13<sup>th</sup> of September 2016.
- 1.14 One of the points raised within the 2010 FCR was the requirement to maintain the option to move West Bridgford Station further into the Rushcliffe District on its capital-planning programme. This was due to the high levels of residential development which were predicted at the time.
- 1.15 The map below shows the position of the old 'Central' Fire station on Shakespeare Street and the new London Road fire station.



Map 1: The location of London Road station being approximately 1.5 miles further south of the former Central station.

## SECTION 2: REPORT

### HISTORICAL DATA ANALYSIS

- 2.1 The first section of analysis gives details on actual operational activities that occurred through a stated date range.
- 2.2 Historical data was compared from the two years prior to the move to London Road (12/09/2014 – 11/09/2016) and the two years after (14/09/2016 – 13/09/2018). This date range was used to give a broad overview of the impact of the change, with the additional benefit of there being limited operational changes during those periods, except for, the introduction of the Systel dynamic mobilising system. Due to the timing of the station move, the commencement of the Systel mobilisation system period was unavoidable.
- 2.3 Data taken from the historical analysis shows what has happened, but does not allow a causal relationship to be drawn in relation to the London Road move. This is due to a number of other variables which may have influenced the data.
- 2.4 The graph below (Figure 1) shows the number of mobilisations for several stations increased between the stated time periods. The largest increase can be seen to have occurred at Stockhill, with an increase of 735 mobilisations, over two years, following the move to London Road.

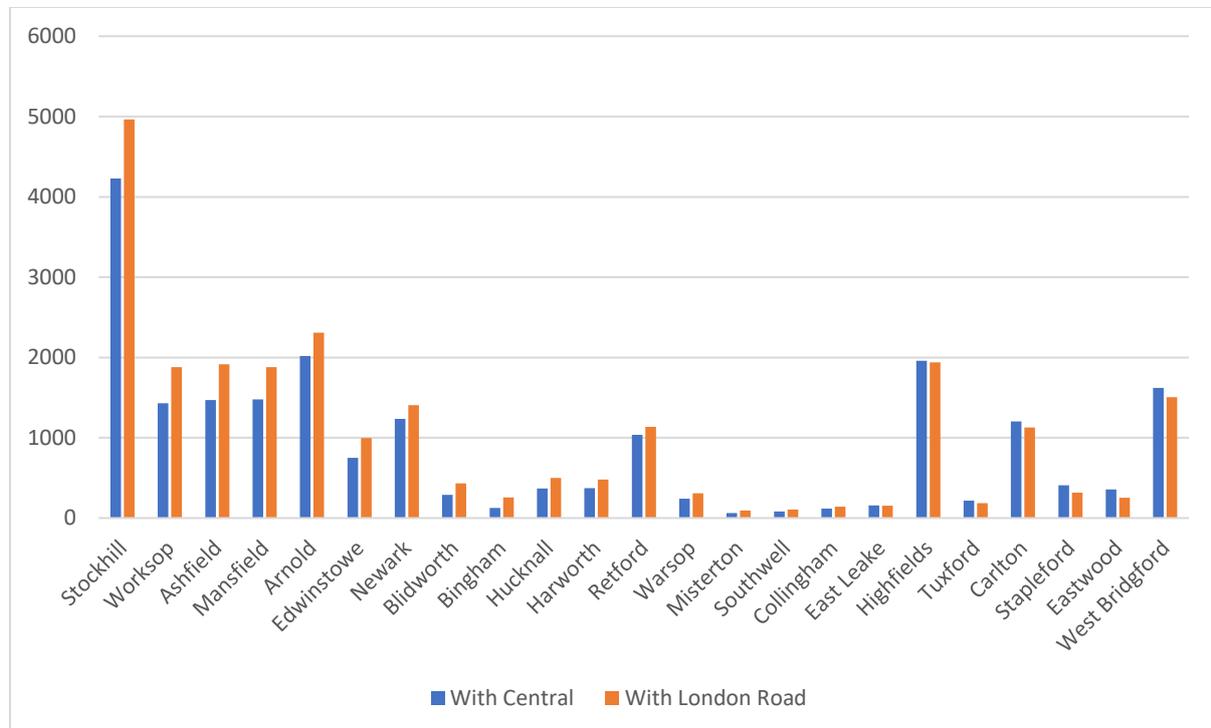


Figure 1: A chart comparing the historical number of mobilisations per station (12/09/2014 – 11/09/2016) to (14/09/2016 – 13/09/2018).

- 2.5 It is also evident that there have been increases in mobilisations amongst several stations which are not located in close proximity to either London

Road or Shakespeare Street. Further detail on these mobilisations can be found in appendix 2.

2.6 On average, across the analysis period, there was, an increase of 9.5% in the number of mobilisations across all stations.

2.7 Data shows an increased number of mobilisations at stations close to the City of Nottingham such as Stockhill (17%) and Arnold (14%) are above this baseline increase. Additionally, the data shows a decrease in mobilisations at West Bridgford (-7%), Carlton (-6%) and Highfields (-1%) are below the baseline increase.

2.8 The graph below (Figure 2) shows an increase in the average attendance time across all risk categories and incident types, with the exception of road traffic collisions (RTCs) and other special services. Reasons for this could include the introduction of the Systel dynamic mobilising system, the distribution of incident locations and changes in policy.

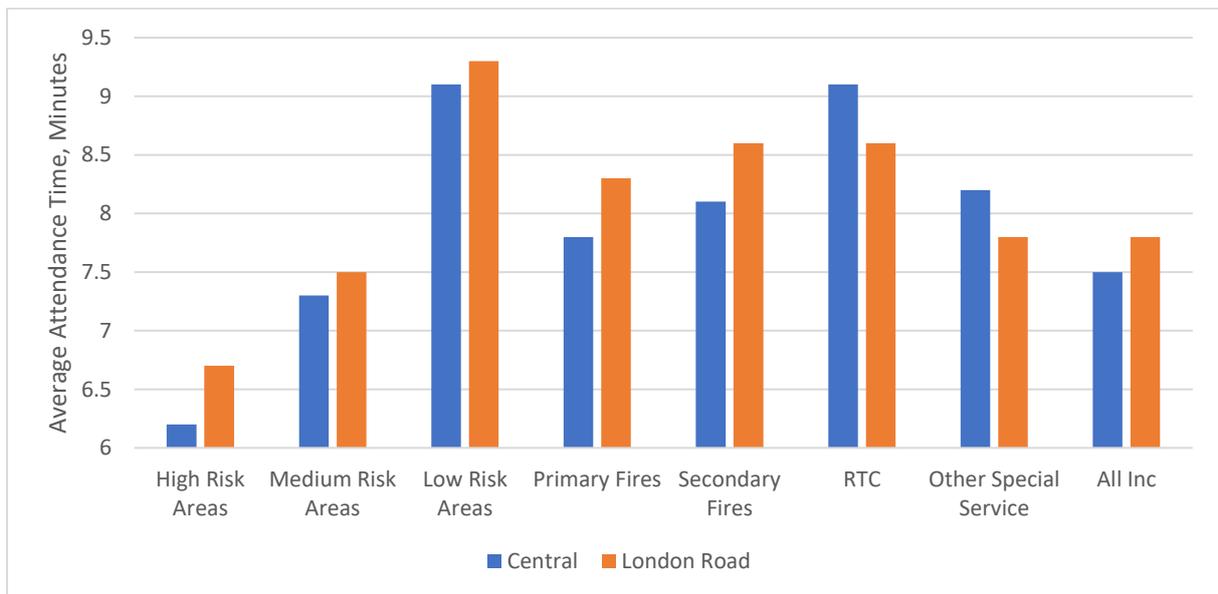


Figure 2: A chart showing the changes in average send to arrive times for all risk categories and incident types across the service.

2.9 The data gathered on the percentage of incidents attended within 8 minutes shows an overall decrease, with the exception of RTCs and special services. Further detail on the percentage of incidents attended within 8 minutes can be found in appendix 4.

## MODELLING

2.10 Modelling and analysis were undertaken using data over a period of three years (01/01/2017 – 31/12/2019). Models were undertaken which included Mixed Crewing at Ashfield and Retford. This included a model of two appliances being staffed 24 hours a day and a model with two appliances available during the day and a single appliance at night.

- 2.11 It should be noted that due to the negligible difference between these two Mixed Crewing models, reference will only be made to the model with 2 appliances available during the day and a single appliance at night within this report.
- 2.12 The nature of the modelling undertaken has removed any other variables as a potential factor for change. Any changes in the modelling outputs can therefore be said to be caused solely by the move of Central Station to London Road and any subsequent knock-on effect due to concurrent incidents.
- 2.13 The modelling for this report was undertaken by the Service's GIS Team using Workload Modeller. Modelling has assumed that all appliances were available at home station if they were not at an incident. The modelling used has not reflected any cover-moves which may have occurred but does reflect the concurrent nature of some of the incidents which occurred during the selected time frame.
- 2.14 The modelling shows that the stations which are positioned more closely to the former Central station site have had an increased number of mobilisations caused by the move. Whereas those stations which are located more closely to the new London Road site have seen a decrease in mobilisations.
- 2.15 It can be seen in figure 3 the greatest increase in mobilisations will have been seen at Stockhill and Arnold stations, whilst the biggest reductions in mobilisations will have been seen at West Bridgford and Highfields stations.
- 2.16 A more detailed breakdown of the modelled mobilisations across the Service can be found in appendix 5.
- 2.17 The graph below (Figure 3) shows that the move from Central to London Road has had an impact on Stockhill with a modelled 16% increase in attendances, which equates to 324 additional mobilisations per year. It can also be seen that Arnold will have seen a modelled increase of 4% increase in attendances, equating to a rise of 44 additional mobilisations per year.

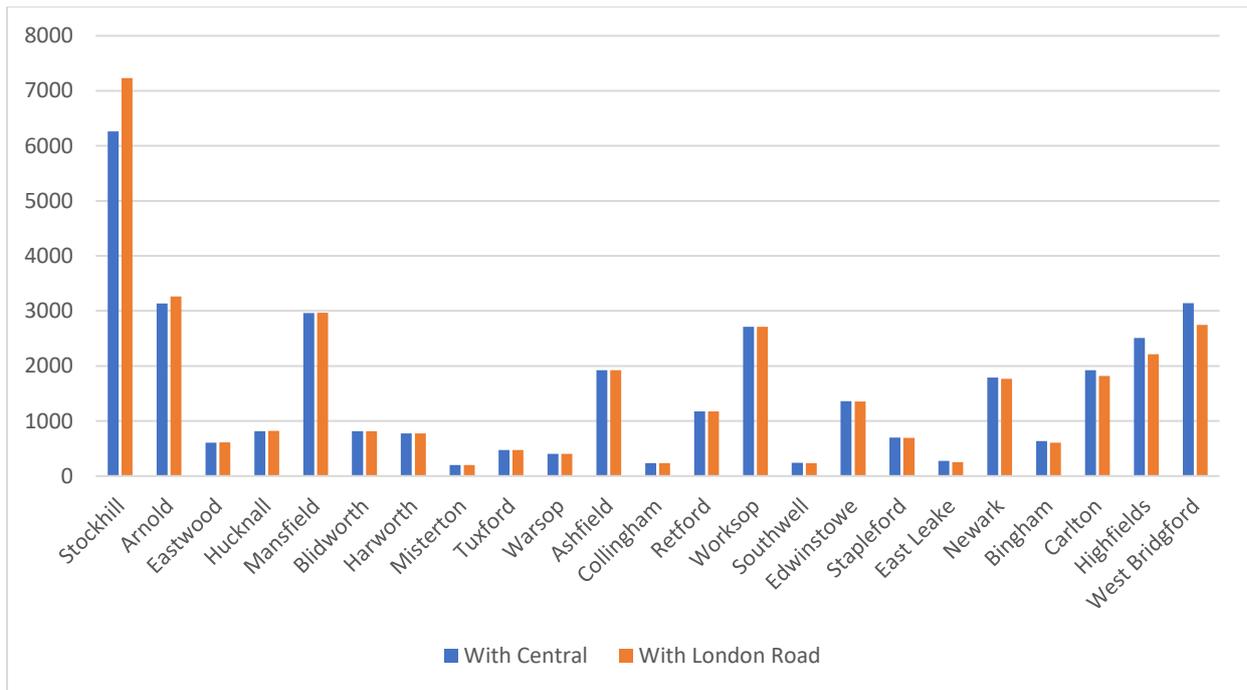
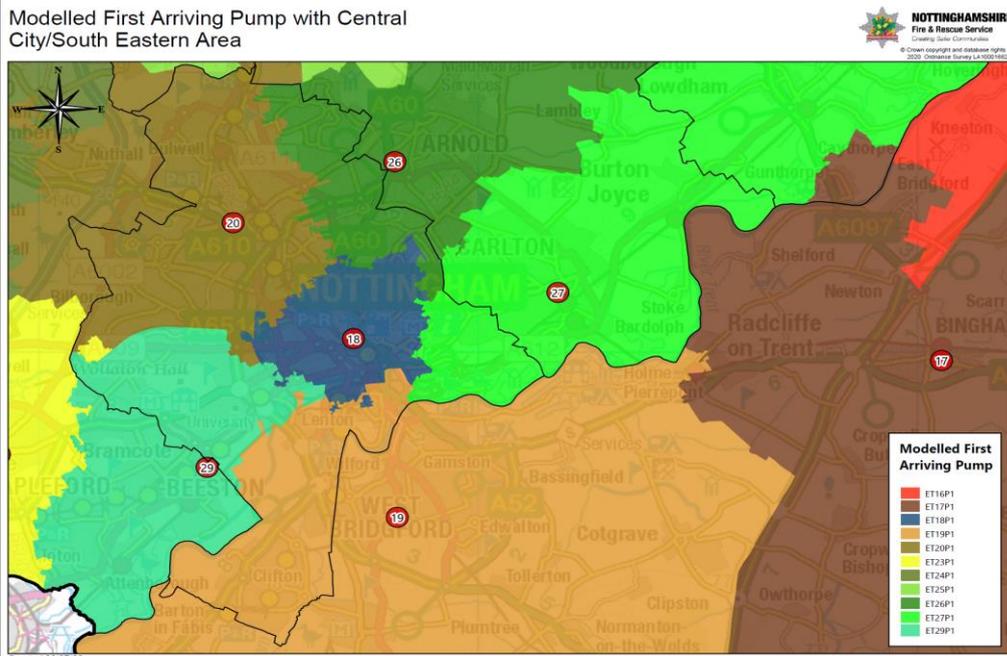
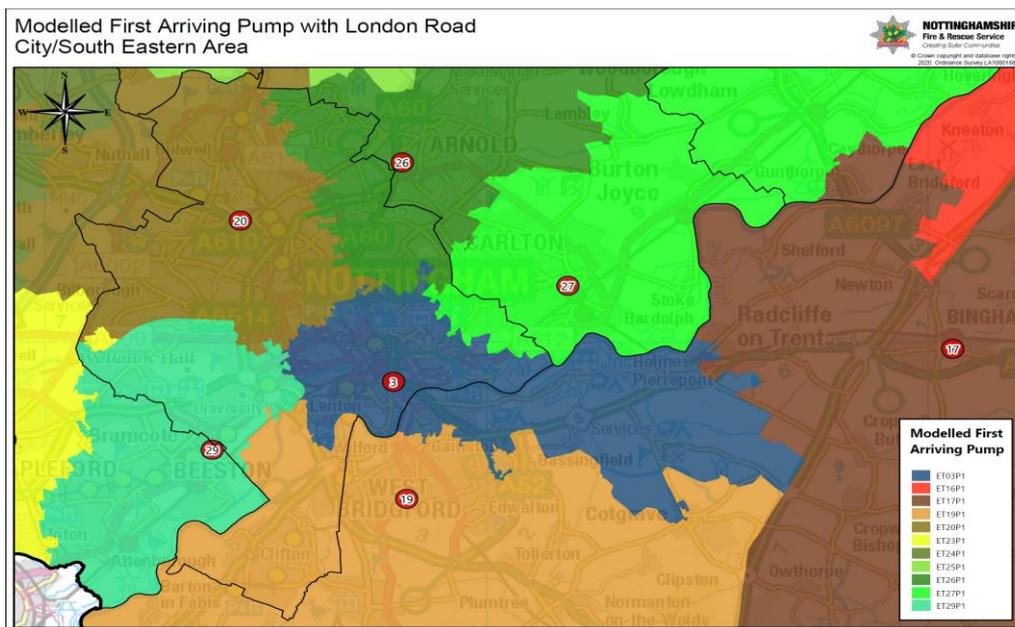


Figure 3: A chart showing the modelled number of mobilisations per station over a three-year period.

- 2.18 There is a corresponding reduction in the number of modelled mobilisations for West Bridgford (-13%), Highfields (-12%), East Leake (-8%) and Carlton (-5%). This equates to a reduction in mobilisations of 398, 300, 24 and 102 respectively (note - modelled data 3-year period).
- 2.19 Modelling and analysis show the London Road move has caused a reduction in mobilisations of some local stations. The data shows the impact on Stockhill due to its proximity to the former Central station location. The station move has extended Stockhill's likely turn-out area further into the northern half of Nottingham City centre. Further detail on the modelled mobilisations can be found in appendix 5.
- 2.20 Although it was expected that the move would impinge on West Bridgford (a 12.7% decrease in mobilisations) it can be seen that there has been a very similar impact on Highfields (an 11.9% decrease in mobilisations).
- 2.21 The two maps below (maps 2 and 3) show the move from Central to London Road has extended the likely turn out area of this station into areas formerly covered by West Bridgford, Carlton and Highfields.
- 2.22 The expansion of the likely turnout areas of Stockhill and Arnold can also be seen in these maps.



Map 2: The modelled likely turn out areas with Central station.



Map 3: The modelled likely turn out areas with London Road station.

2.23 It can be seen from the graph below (figure 4) that there has been an increase in the average time it takes an appliance to arrive at all incidents from the moment it is mobilised by Control. The data also highlights an increase in attendance times to 'other special service' incidents.

2.24 The graph also shows that a greater increase can be seen in the 'send to arrive' time to incidents in high risk areas. This has increased from an average of 6 minutes 42 seconds prior to the London Road move to 7 minutes 12 seconds after. An increase of thirty seconds.

2.25 Despite this increase, the time of 7 minutes 12 seconds, to high risk areas, is still under the Service’s response standard of 8 minutes.

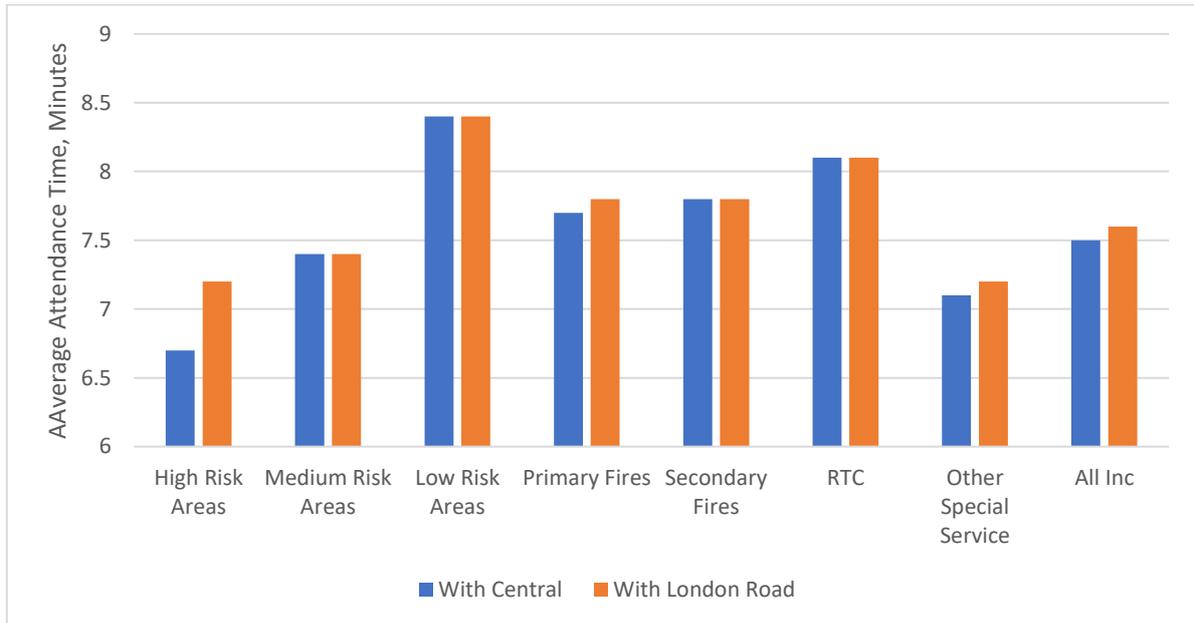


Figure 4: A chart showing the modelled average send to arrive time across a three-year period for all risk categories and incident types.

2.26 Data shown in the graph below (figure 5) shows that the average attendance time to life-risk (P1) incidents has risen by 6 seconds when attending primary fires. The attendance times to P1 RTCs and ‘other special service calls’ have not changed.

2.27 A modelled scenario shows an increase in attendance to primary fires (7:30 minutes to 7:36 minutes). Of note, this is under the Service’s response standard of eight minutes.

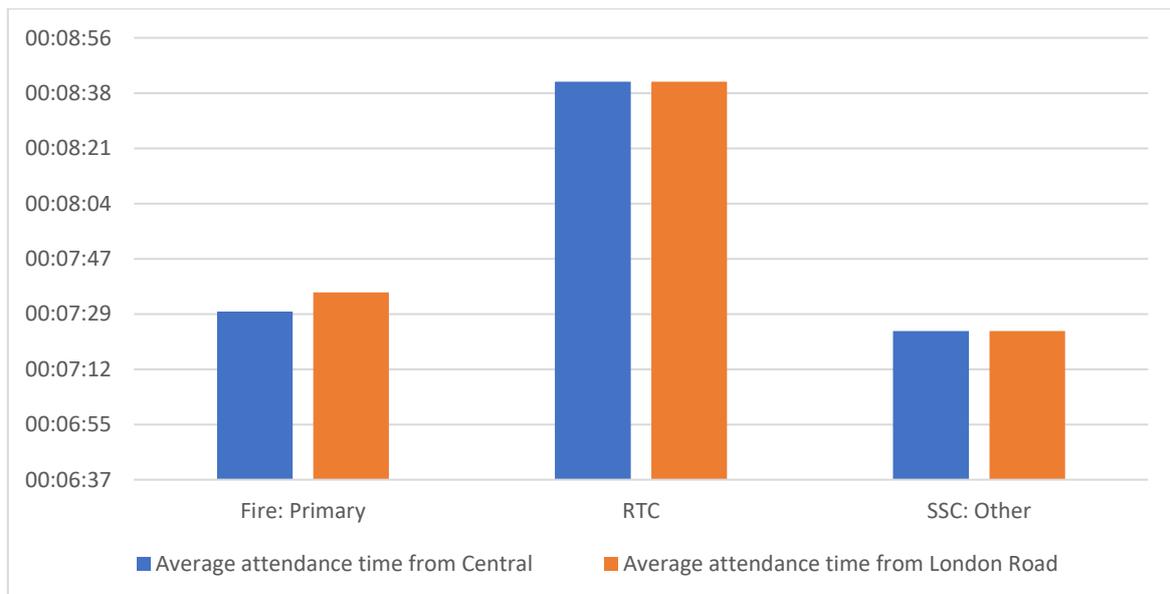
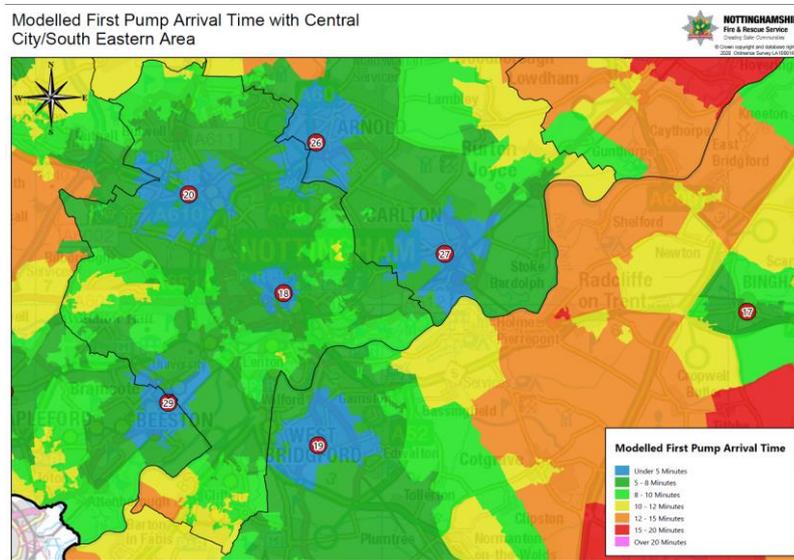
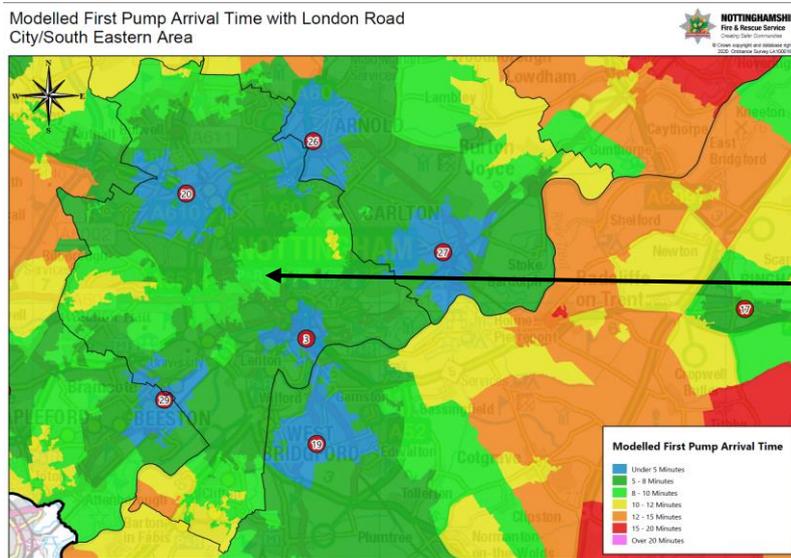


Figure 5: A chart showing the modelled average first pump attendance time to life-risk (P1) incidents from Central and London Road.

2.28 A comparison between maps 4 and 5 (below) shows that following the move to London Road, there is an area within the city centre (highlighted in Map 5) which now has an average attendance time which is more than one minute slower than the response received from Central fire station.



Map 4: The modelled first pump arrival time with Central station.

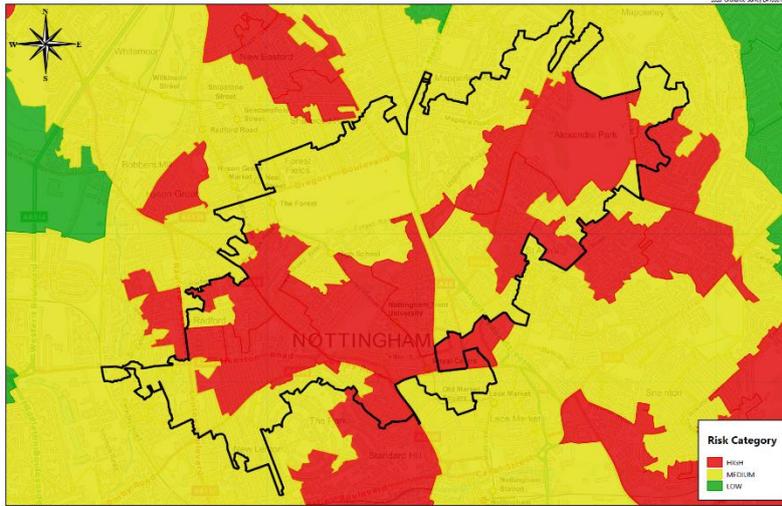


This area of light green, north of London Road station, shows an area of the city where attendance times have increased by more than 1 minute. Risk categorisation of this area can be referenced in map 6.

Map 5: The modelled first pump arrival time with Central station.

Map 6 (below). The black line shows a more detailed area of the city where the response time has increased (greater than 1 minute). This includes areas deemed 'high risk' (shown in red).

Zone of >1 Minute Slower Attendance Time with London Road  
with LSOA Risk Categories



Map 6: The areas of the City which now receives a slower attendance time overlaid with risk categorisation.

The area highlighted above includes parts of the following wards:

- Mapperley
- St Ann's
- Castle
- Lenton & Wollaton East
- Radford
- Hyson Green & Arboretum
- Berridge

## PREVENTION ACTIVITY

2.29 Prevention activity is key to delivering our commitment of creating safer communities

2.30 The table below (Figure 6) shows there has been a progressive increase in the numbers of Safe and Well Visits (SWVs) in the City of Nottingham since 2013.

2.31 The data also shows there has been an increase in the number of SWVs being carried out in high risk areas. SWVs in high risk areas within the City of Nottingham district accounts for approximately 53% of all the total within the County.



Figure 6: A chart showing the Safe and Well Visits (SWVs) undertaken in the City of Nottingham including detail on SWVs delivered in high risk Lower Super Output Area (LSOAs).

- 2.32 The table below (figure 7) shows that there has been a progressive increase in the numbers of prevention activities in the City of Nottingham since 2015.
- 2.33 It can also be seen that there has been an increase in the number of wider prevention activities being undertaken in high risk areas. Prevention activities in high risk areas within the City of Nottingham District accounts for approximately 47% of all the total within the County.
- 2.34 With the changes to LSOAs in 2015, it is not possible to directly compare prevention activities from before and after the move to London Road station.



Figure 7: A chart showing the prevention activities undertaken in the City of Nottingham including detail on those activities delivered in high risk Lower Super Output Area (LSOA's).

## FINANCIAL INFORMATION

- 2.35 The overall budget for the relocation project was predicted to be £5.005 million in October 2015. The actual cost to deliver the project was £4.417 million.
- 2.36 Central station was freehold and owned by NFRS and was sold as part of the wider premises under a joint disposal agreement with Nottinghamshire Police, in March 2017, for a capital receipt of £2.5 million.
- 2.37 The site of the London Road station was previously Gresham Works site and owned by Nottingham City Council. The site, which was valued at £600k, was purchased for a nominal £1 from the Council in 2015. NFRS own the site freehold.
- 2.38 After the income from the sale of Central station the net capital cost of the London Road build was approximately £1.92M.
- 2.39 London Road station provides accommodation for the Nottingham City Emergency Planning Team (EPT). The EPT have a 50-year lease for use of office space within the London Road site. The lease was agreed as £1 per year with a quarterly service charge.
- 2.40 The new station also provides accommodation for the Neighbourhood Policing Team for the Meadows area. This is charged at an annual rate of £1700 including service charges. Additionally, East Midlands Ambulance Service (EMAS) utilise the site as a standby and welfare location for personnel. EMAS contribute an annual fee of £7500 for the London Road site.
- 2.41 The running costs of the two stations can be directly compared with the average cost of Central station being £151,869 (2013- 2017) against an average of £145,355 for London Road (2016-2020). Further detail can be found in appendix 10 and 11.
- 2.42 With the information currently available through the service's Agresso system, it cannot be reported that the expected savings on running costs for the new station have been realised.
- 2.43 The Service is currently undertaking an appeal against the business rates it is currently paying (£91,136 for 2020/2021 at London Road).
- 2.44 Although the expected cost of planned and reactive maintenance of the old Central station were expected to rise significantly in order to meet the requirements of a modern Service, these are not reflected in the detail of appendix 8 due to the 'winding down' of the site prior to the planned move.
- 2.45 Through the information gathering process of developing this report it became evident that the some of the information relating to Central station in Agresso was not accurate and therefore it has presented an inability to accurately measure like-for-like costings.

## **AREAS OF ASSURANCE AND RECOMMENDATIONS**

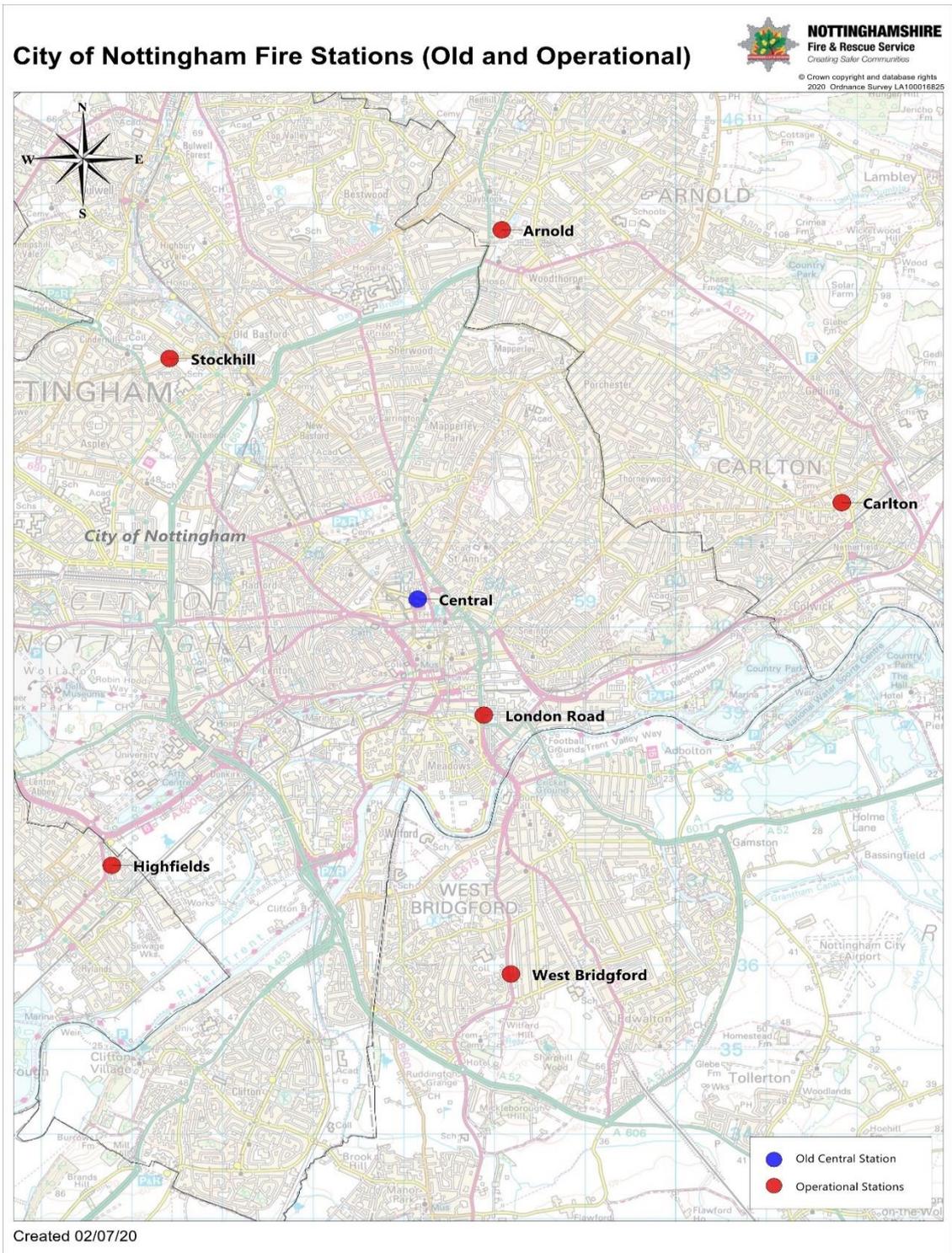
### **2.46 Areas of Assurance:**

- Despite an increase in attendance times the Service is still able to respond, on average, to high risk areas, within its target of eight minutes.
- There has been a progressive increase in the number of SWVs, and other prevention activities, undertaken within the City of Nottingham area.

### **2.47 Recommendations:**

- When undertaking operational response modelling, such as that undertaken to inform the FCR 2010, the Service should be aware that the timeliness of the implementation of any change may impact on the currency of the predictions.
- Although the data shows a progressive increase in prevention activity across the City areas, the Service should assure itself of its prevention strategy for the high-risk areas that now have an increased attendance time (greater than one minute).
- It does not appear that the predicted savings on running costs for the London Road site, against those of the Shakespeare Road site, have been realised. The Service may wish to consider how it calculates and monitors this for future station builds.

# APPENDICES



**Appendix 1:** The locations of the stations surrounding Nottingham City Centre and the former Central station site.

Station Name	Mobilisations before London Road	Mobilisations after London Road	Difference	% Change
Bingham	125	258	133	106.40
Misterton	62	95	33	53.23
Blidworth	290	431	141	48.62
Hucknall	367	500	133	36.24
Edwinstowe	750	998	248	33.07
Southwell	81	107	26	32.10
Worksop	1429	1878	449	31.42
Ashfield	1470	1913	443	30.14
Harworth	371	481	110	29.65
Warsop	242	310	68	28.10
Mansfield	1478	1879	401	27.13
Collingham	118	141	23	19.49
Stockhill	4230	4965	735	17.38
Arnold	2020	2309	289	14.31
Newark	1235	1405	170	13.77
Retford	1036	1137	101	9.75
Highfields	1959	1938	-21	-1.07
East Leake	157	152	-5	-3.18
Carlton	1205	1127	-78	-6.47
West Bridgford	1621	1506	-115	-7.09
Tuxford	217	184	-33	-15.21
Stapleford	408	318	-90	-22.06
Eastwood	357	253	-104	-29.13
Central	5878	0	-5878	
London Road	0	5422	5422	

**Appendix 2:** A table detailing the difference in station mobilisations per station two years prior and two years post London Road implementation.

	Central	London Road
High Risk Areas	6.2	6.7
Medium Risk Areas	7.3	7.5
Low Risk Areas	9.1	9.3
Primary Fires	7.8	8.3
Secondary Fires	8.1	8.6
RTC	9.1	8.6
Other Special Service	8.2	7.8
All Inc	7.5	7.8

**Appendix 3:** Details the average attendance times to different risk categories and incident types two years prior and two years post London Road implementation.

	Central	London Road
High Risk Areas	82.7%	78.7%
Medium Risk Areas	68.6%	65.6%
Low Risk Areas	49.4%	46.5%
Primary Fires	64.2%	59.5%
Secondary Fires	60.3%	53.3%
RTC	48.9%	51.0%
Other Special Service	60.4%	62.6%
All Inc	66.9%	63.6%

**Appendix 4:** Table showing the percentage of incidents attended within eight minutes two years prior and two years post London Road implementation.

Station Name	Mobs with Central	Mobs With LR	Difference	% Change
Stockhill	6261	7233	972	15.5
Arnold	3135	3266	131	4.2
Eastwood	604	614	10	1.7
Hucknall	813	819	6	0.7
Mansfield	2961	2967	6	0.2
Blidworth	813	813	0	0.0
Harworth	773	773	0	0.0
Misterton	198	198	0	0.0
Tuxford	472	472	0	0.0
Warsop	405	405	0	0.0
Worksop	2715	2714	-1	0.0
Ashfield	1925	1924	-1	-0.1
Retford	1177	1176	-1	-0.1
Edwinstowe	1358	1353	-5	-0.4
Collingham	237	236	-1	-0.4
Southwell	240	238	-2	-0.8
Stapleford	699	693	-6	-0.9
Newark	1791	1767	-24	-1.3
Bingham	635	609	-26	-4.1
Carlton	1923	1821	-102	-5.3
East Leake	277	253	-24	-8.7
Highfields	2512	2213	-299	-11.9
West Bridgford	3142	2745	-397	-12.6
Central	6879	0	-6879	
London Road	0	6643	6643	

**Appendix 5:** A table detailing the modelled difference in station mobilisations over a three-year period.

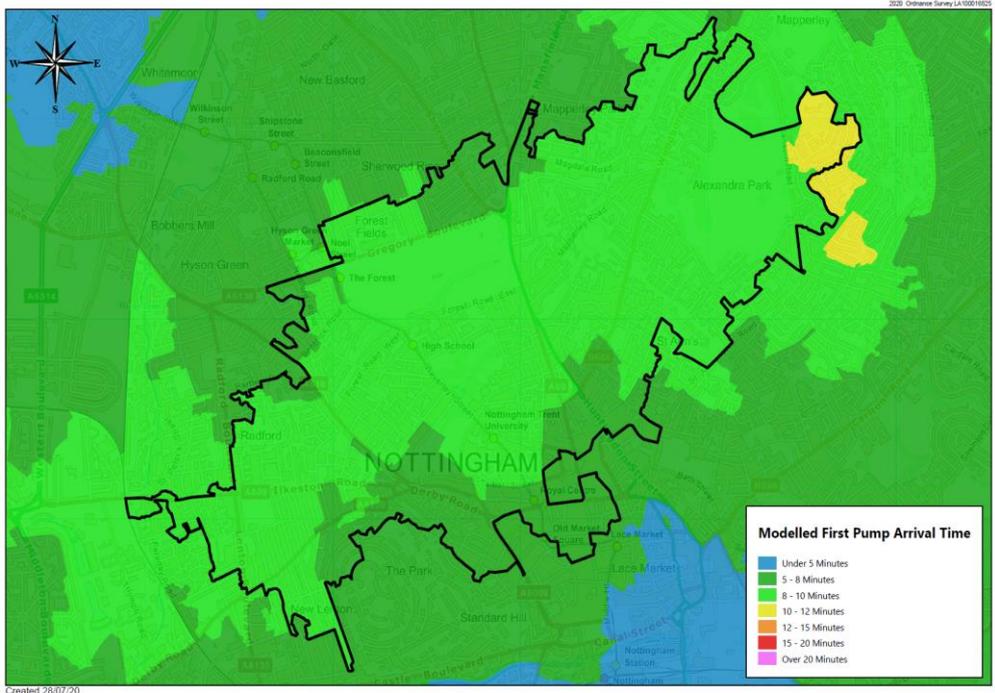
	Central	London Road
High Risk Areas	6.6	7.2
Medium Risk Areas	7.7	7.7
Low Risk Areas	8.6	8.6
Primary Fires	8	8.1
Secondary Fires	8.1	8.1
RTC	8.3	8.3
Other Special Service	7.4	7.4
All Inc	7.7	7.8

**Appendix 6:** A table detailing the changes to the average 'send to arrive' time across all risk categories and incident types using the modelled data over a three-year period.

	Central	London Road
High Risk Areas	75.8%	65.8%
Medium Risk Areas	56.9%	55.7%
Low Risk Areas	48.1%	48.3%
Primary Fires	55.0%	53.1%
Secondary Fires	52.8%	51.7%
RTC	49.6%	48.6%
Other Special Service	63.3%	60.6%
All Inc	58.8%	56.1%

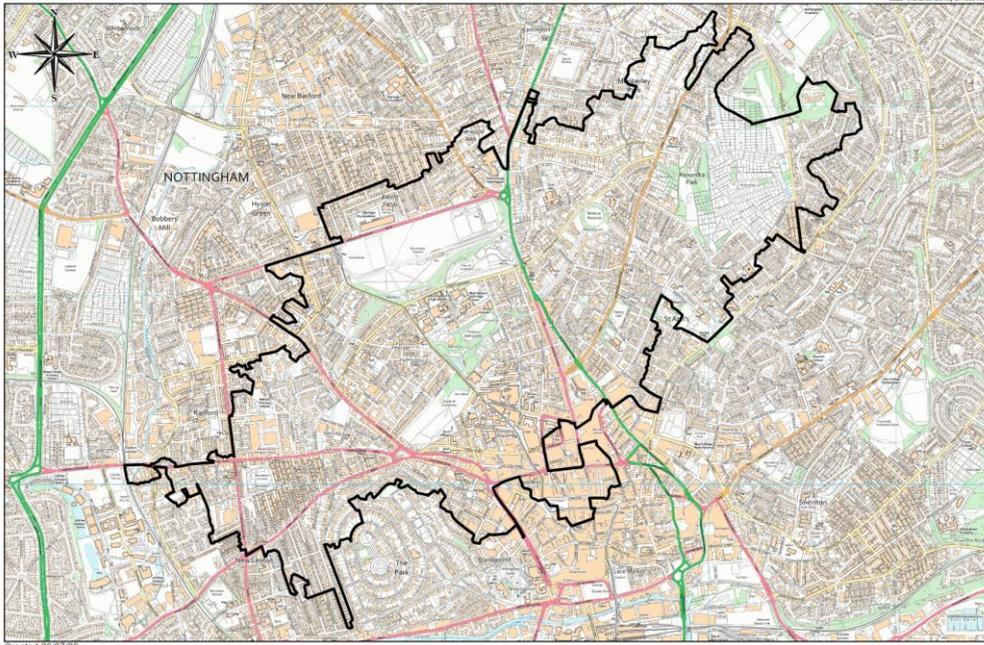
**Appendix 7:** A table showing the percentage of incidents attended within eight minutes using the modelled data over a three-year period.

Zone of >1 Minute Slower Attendance Time with London Road with Current Modelled First Pump Arrival Times



**Appendix 8:** Map showing the zone of Output Areas experiencing a modelled attendance time over a minute slower with London Road as compared to with Central overlaid with risk categorisation.

Zone of >1 Minute Slower Attendance Time with London Road



**Appendix 9:** Map showing the zone of Output Areas experiencing an attendance time over a minute slower with London Road as compared to with Central.

<b>Central Fire Station Running Costs</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>
Building Maintenance - Planned	1,812	10,133	1,458	55
Buildings Repairs and Maintenance - Reactive	13,210	13,381	11,311	4,375
Business Rates	24,766	38,078	39,935	82,474
Catering Equipment	150		7	
Cleaning Equipment	55	102	0	
Cleaning Materials	877	756	1,753	718
Contract Cleaning	35,143	35,288	36,914	36,754
Electricity			256	16
Fixtures & Fittings			273	10
Gas			20	52
Grounds Maintenance	575	562	596	540
Office Equipment	44	43		23
Phones - Landline	1,732	1,938	1,867	1,238
Refuse / Trade Waste Collection	1,359	885	1,697	529
Rent of Premises	66,398	79,715	28,337	25,183
Sewerage and Environmental	1,126	486	1,186	1,195
Window Cleaning	451	461	470	476
<b>Grand total</b>	<b>147,698</b>	<b>181,828</b>	<b>126,080</b>	<b>153,639</b>
<b>2013/14 to 2015/16 average</b>		<b>151,869</b>		

**Appendix 10:** Table showing a summary of the running costs of Central fire station;2013-2017.

<b>London Road Fire Station Running Costs</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>	<b>2019/20</b>
Building Maintenance - Planned	334	6,593	23,810	13,230
Buildings Repairs and Maintenance - Reactive	2,375	5,884	7,630	8,277
Business Rates		120,568	87,754	89,712
Catering Equipment	801	133		149
Cleaning Materials	642	2,428	2,531	2,882
Contract Cleaning	881	21,095	23,226	22,504
Electricity	9,489	17,281	16,447	20,492
Fixtures & Fittings	61	52		22
Gas		8,729	9,189	11,182
Grounds Maintenance	63	462	378	428
Office Equipment				112
Refuse / Trade Waste Collection	85	958	552	439
Rent/Hire of Accommodation - Income	-3,091	-21,543	-38,644	-39,319
Sewerage and Environmental	303	1,834	1,100	1,033
Water Rates	506	1,971	1,682	1,469
Window Cleaning		240	247	865
<b>Grand total</b>	<b>12,448</b>	<b>166,685</b>	<b>135,903</b>	<b>133,478</b>
<b>2017/18 to 2019/20 average</b>			<b>145,355</b>	

**Appendix 11:** Table showing a summary of the running costs of London Road fire station;20176-2020.

Station Name	Central	London Road	Difference	% Change
Stockhill	6241	7213	972	15.6
Arnold	3126	3257	131	4.2
Eastwood	558	568	10	1.8
Hucknall	736	742	6	0.8
Mansfield	2681	2686	5	0.2
Ashfield	2505	2505	0	0.0
Harworth	747	747	0	0.0
Misterton	171	171	0	0.0
Retford	1483	1483	0	0.0
Tuxford	418	418	0	0.0
Warsop	389	389	0	0.0
Worksop	2579	2578	-1	0.0
Blidworth	745	744	-1	-0.1
Edwinstowe	1265	1260	-5	-0.4
Collingham	212	211	-1	-0.5
Southwell	239	237	-2	-0.8
Stapleford	699	693	-6	-0.9
Newark	1787	1763	-24	-1.3
Bingham	635	609	-26	-4.1
Carlton	1923	1821	-102	-5.3
East Leake	277	253	-24	-8.7
Highfields	2512	2212	-300	-11.9
West Bridgford	3141	2743	-398	-12.7
Central	6876	0	-6876	
London Road	0	6642	6642	

**Appendix 12:** A table detailing the modelled difference in station mobilisations over a three-year period with no Mixed Crewing implemented at Retford and Ashfield.

	With Central	With London Road
High Risk Areas	6.7	7.2
Medium Risk Areas	7.4	7.4
Low Risk Areas	8.4	8.4
Primary Fires	7.7	7.8
Secondary Fires	7.8	7.8
RTC	8.1	8.1
Other Special Service	7.1	7.2
All Inc	7.5	7.6

**Appendix 13:** A table detailing the modelled changes to the average 'send to arrive' time across all risk categories and incident types using the modelled data over a three-year period with no Mixed Crewing implemented at Retford and Ashfield.

	Central	London Road
High Risk Areas	76.9%	66.9%
Medium Risk Areas	61.3%	60.0%
Low Risk Areas	50.0%	50.3%
Primary Fires	58.2%	56.3%
Secondary Fires	56.5%	55.4%
RTC	52.4%	51.4%
Other Special Service	66.9%	64.2%
All Inc	61.9%	59.1%

**Appendix 14:** A table showing the modelled percentage of incidents attended within eight minutes using the modelled data over a three-year period with no Mixed Crewing implemented at Retford and Ashfield.

**Appendix 15:** Definition and calculation of Risk categories.

Risk areas are determined using the scoring system detailed below and using historical data combined with indicators of deprivation levels. The 'high risk' category defines those areas within the County that are the most at risk.

A risk score for each Lower Level Super Output Area (LSOA) is calculated by combining six factors, each of which impact on Fire Service delivery. These factors include:

Incidents we have attended (data from the past five years):

- Dwelling Fires ("DwF")
- Property fires at which injuries to members of the public have occurred ("Inj")
- Deliberate non-domestic building fires ("DelB")
- Special services incidents at which there is a risk to life ("SSC")

Historic fatalities (data from the past five years):

- Deaths caused by property fires ("Fat")

Deprivation Indicators Indices of Multiple Deprivation (IMD)

- IMD Score

These factors are weighted according to their importance and combined to give an overall Risk Score for each LSOA.

Weightings:

DwF: 1.9

Inj: 0.46

DelB: 0.05

SSC: 0.35

Fat: 0.04

IMD: 1.5

The top 8.5% of LSOAs become "High Risk", the bottom 42.5% become "Low Risk" and those in between become "Medium Risk". Examination of these risk scores allows us to see the relative distribution of risk throughout the County and City.

The Service Risk Map is updated annually, to include the most recent five years of data and most up to date IMD figures and allows us to identify how the distribution of our highest risk areas may be changing.

**Appendix 16:** The Lower Super Output Area (LSOA)

Risk rating is based on the annual risk map produced by the GIS team. Each premises has an associated LSOA risk, depending on which LSOA it is contained within.

The LSOA's changed in 2015. The NFRS risk map is based on the previous year's data, so within this report only visits from 2016 will have an associated LSOA risk rating. Earlier data will have an 'unknown risk'.

**Appendix 17:** A map detailing the high-risk areas of the City which has seen an increase of attendance time greater than one minute. Wards include Mapperley, St Ann's Castle, Radford and Hyson Green. (a list of streets contained within this area is available from Corporate Support, but is not contained within this report).

