# Manchester City Council Report for Information

**Report to:** Neighbourhoods and Environment Scrutiny Committee

- 6 February 2019

**Subject:** Scheme Review – Princess Road / Princess Parkway

(Speed Limit Reduced from 40mph to 30mph)

**Report of:** The Operational Director of Highways

### Summary

The purpose of this report is to review the speed limit reduction scheme that was implemented on the A5103 - Princess Road and the impact on 2 adjacent roads (Alexandra Road South and Nell Lane). The speed limit along Princess Road was recently reduced from 40 mph down to 30mph - implemented on the 30 April 2017 via the introduction of a Temporary Traffic Regulation Order (TTRO). This temporary order was put in place as a safety precaution while the permanent order was progressed.

The scheme was developed in response to public concerns around road safety, and in particular the safety of pedestrians crossing Princess Rd. The severity of the concerns had been heightened by two fatal collisions involving pedestrians at the Darley Avenue crossing in December 2015 and December 2016.

### Recommendation

Scrutiny Committee is asked to consider the content of this report.

**Wards Affected:** Chorlton Park, Didsbury West, Fallowfield, Hulme, Moss Side, Old Moat, Whalley Range

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Background documents (available for public inspection): None

# 1.0 Introduction and Background

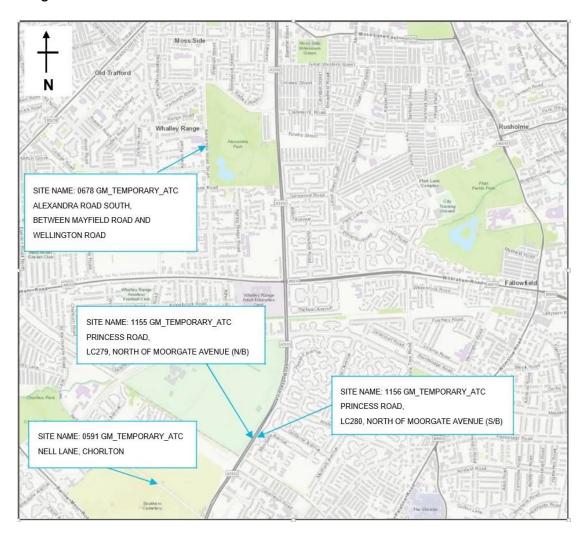
- 1.1 Princess Road is a key arterial route running north-south, and linking the M56/M60 in the south of Manchester to the City Centre. The road was previously subject to a 40mph speed limit along the entirety of its length.
- 1.2 In response to public concerns with regard to safety, and in particular the safety of pedestrians crossing Princess Road, a Temporary Traffic Regulation Order (TTRO) was implemented on the 30th April 2017 reducing the speed limit to 30mph. The severity of the concerns had been heightened by two fatal collisions involving pedestrians at the Darley Avenue crossing in December 2015 and December 2016.
- 1.3 Consultation on the speed reduction proposal was carried out with key stakeholders and members of the public between 11th August and 23rd September 2016 regarding the potential reduction in speed limit.
- 1.4 In order to implement the TTRO, temporary information signs were provided along the length of Princess Road to inform drivers of the new 30mph limit. The existing 40mph roundel signs were used to create 30mph roundels, leaving open the option of reinstating the previous 40mph limit if necessary.
- 1.5 Monitoring undertaken during the TTRO period established that the reduction of the speed limit had a positive impact on Princess Road. The scheme saw a reduction of vehicular speeds and greater speed limit consistency along the A5103 corridor. There was evidence of a slight reduction in traffic volume and accident frequency during the TTRO period, suggesting the reduced speed limit had contributed to a safer environment for all road users.
- 1.6 As such, recommendations were made to make the speed limit reduction permanent, and the legal advertisements for the proposal took place in March 2018. There were no objections to the proposals, and the order came into force permanently on 28th March 2018.
- 1.7 This paper will provide specific information that has been requested by the committee. This information includes:
  - Analysis on the impact on the flow of traffic at peak times of the day
  - The impact of vehicles using surrounding roads as an alternative route
  - Collision Data
  - Speeding Fines

### 2.0 Traffic Counts

2.1 In order to determine whether the reduction in speed limit has had an effect on vehicular use of Princess Road, traffic flow and volume data was reviewed. Figure 'AA' shows the locations of the traffic counts on Princess Road, Alexandra Road and Nell Lane that were used for the analysis. Existing traffic data was acquired from TfGM records at each location before the speed limit reduction was implemented. Data was extracted for a 1 hour period during

- both the AM and PM peak for a neutral weekday (Tuesday-Thursday during school term time).
- 2.2 A growth figure has been calculated for the AM and PM peak at each location and applied to the before count data. This creates an equivalent benchmark to 'normalise' annual increases in traffic flows and therefore allows comparisons between data to me more accurately assessed.
- 2.3 Traffic counts were conducted on Princess Road after the 30mph speed limit scheme was introduced at each location in February 2018. The counts were undertaken for an hour during both the AM and PM peak in both directions on a neutral weekday.

Figure 'AA' - Locations of the Traffic Count



2.4 Princess Road - The results of the counts are summarised below in Table 2.5.

				Princess Road					
		LC27	9, <b>N</b> o	rth of	of LC280, North of				
		Moorg	ate A	Avenue Moorgate Avenue					
		(Nor	thbo	ound)					
						(Southbound)			
		AM		PM	AM		PM		
		Peak		Peak		Peak	Peak		
		(08:00 -		(16:00 -		(08:00 -	(16:00 -		
		09:00)		17:00)		09:00)	17:00)		
BEFORE	28/03/2017	1298		1720		1291	1989		
(factored)									
AFTER	27/06/2017	988		1503		1361	1494		
	13/02/2018	1025		1303		991	2118		

- 2.6 The results of the before and after counts generally indicate a reduction in peak traffic flow, with the exception of the AM southbound evening peak. The after count when compared with the before count again indicates a general decrease, with the exception of the PM southbound peak. Both increases identified are small and can be attributed to day-to-day fluctuations caused by factors such as weather, roadworks and local events.
- 2.7 Alexandra Road traffic count data for Alexandra Road was available only before the implementation of the 30mph speed limit, and was recorded between Mayfield Road and Wellington Road. The results of the November 2014 count, and the February 2018 count are summarised below in Table 2.8.

#### 2.8 Table 2.8 - Alexandra Road Traffic Count

		Alexandra Road South, between Mayfield Road & Wellington Rd					
		AM	Peak		PM F	Peak	
		(08:00 -	- 09:00)		(16:00 -	- 17:00)	
		Northbound	Northbound Southbound		Northbound	Southbound	
BEFORE	18/11/2014	659	313		398	652	
(factored)							
AFTER	08/02/2018	600	399		299	573	

- 2.9 The after count when compared with the before count indicates a small general decrease, with the exception of the AM southbound peak. The variations between before and after traffic counts are small and can again be attributed to day-to-day fluctuations, and there is no evidence to suggest drivers are using Alexandra Road as an alternative to Princess Road following implementation of the speed reduction scheme.
- 2.10 Nell Lane traffic count data for Nell Lane was available before the implementation of the 30mph speed limit, and was recorded west of Princess

Road. The results of the March 2015 count and the February 2018 count are summarised below.

### 2.11 Table 2.11 - Nell Lane Traffic Count

		Nell Lane, Chorlton						
		AM	Peak	PM Peak				
		(08:00 -	- 09:00)	(16:00 -	<b>- 17:00)</b>			
		Northbound	Southbound	Northbound	Southbound			
BEFORE	17/03/2015	353	250	380	390			
(factored)								
AFTER	15/02/2018	345	290	385	397			

2.12 The after count when compared with the before count indicates generally small increases in traffic volume, with the exception of the AM northbound peak. In 3 cases (AM northbound, both PM directions) the variation in number of vehicles recorded is less than 10. The variations are very small and can be attributed to day-to-day fluctuations. There is no evidence to suggest the decrease in speed limit on Princess Road has caused an increase in traffic volume on Nell Lane.

# 3.0 Collision Analysis

- 3.1 To help us to measure the success of the reduced speed limit we have included a review of the collision records. An analysis has been undertaken before and after the reduction of the speed limit. This has been undertaken for Princess Road, Alexandra Road and Nell Lane.
- 3.2 Generally, Inappropriate and excessive speed is often a contributing factor in a high proportion of traffic collisions, as the higher a vehicles speed the shorter the driver's reaction time. Excessive speed clearly has a major impact on the severity of a collision due to the increased force involved, and even small increases in speed can cause a significant increase in accident severity.
- 3.3 You will note that the before collision data covers a 36 month period and the after a 12 month period. Generally, you would analyse collision data over a 3 or 5 year period, however as the speed limit has not been in effect for that length of time we have analysed 12 months of after data, which helps to make some direct comparisons easier.
- 3.4 Princess Road Collision Statistics (Pre-Speed Limit Change)

Princess Road Recorded Collisions: 2014 - 2017 (36 months data)			
(Pre-Speed Limit Change)			
Route Sectors	Slight	Serious	Fatal
Mancunian Way - Radnor Street	7	0	1
*Radnor Street - Parkside Road	22	2	0
Parkside Road - Mauldeth Road West	18	5	0

Mauldeth Road West - Barlow Moor Road	19	3	0
Barlow Moor Road - Princess Parkway		0	2
<u>Total</u>	<u>70</u>	<u>10</u>	<u>3</u>
* Existing 30mph speed limit prior to whole corridor change			

# 3.5 Princess Road Collision Statistics (Post-Speed Limit Change)

Princess Road Recorded Collisions: 2017 – 2018 (12 months data)			
(Post-Speed Limit Change)			
Route Sectors	Slight	Serious	Fatal
Mancunian Way - Radnor Street	4	0	0
*Radnor Street - Parkside Road	3	2	0
Parkside Road - Mauldeth Road West	4	1	0
Mauldeth Road West - Barlow Moor Road	11	2	0
Barlow Moor Road - Princess Parkway	2	1	0
<u>Total</u>	<u>24</u>	<u>6</u>	<u>0</u>
* Existing 30mph speed limit prior to whole corridor change			

# 3.6 Alexandra Rd / South Collision Statistics (Pre-Speed Limit Change)

Alexandra Rd/ South Recorded Collisions: 2014 – 2017 (36 months data)			
(Pre-Princess Road Speed Limit Change)			
Route Sectors	Slight	Serious	Fatal
Moss Lane West - Claremont Road	1	0	0
Claremont Road - Wilbraham Road	5	1	0
Wilbraham Road - Mauldeth Road West	0	0	0
<u>Total</u>	<u>6</u>	<u>1</u>	0

# 3.7 Alexandra Rd / South Collision Statistics (Post-Speed Limit Change)

Alexandra Rd/ South Recorded Collisions: 2017 – 2018 (12 months data)			
(Post-Princess Road Speed Limit Change)			
Route Sectors	Slight	Serious	Fatal
Moss Lane West - Claremont Road	0	0	0
Claremont Road - Wilbraham Road	2	0	0
Wilbraham Road - Mauldeth Road West	0	0	0
<u>Tota</u>	<u> 2</u>	0	<u>0</u>

### 3.8 Nell Lane Collision Statistics (Pre-Speed Limit Change)

Nell Lane Recorded Collisions: 2014 – 2017 (36 months data)			
(Pre-Princess Road Speed Limit Change)			
Route Sectors	Slight	Serious	Fatal
Sandy Lane - Mauldeth Road West	2	0	0
Mauldeth Road West - Princess Road	1	1	0
Princess Road - Burton Road	0	0	0
Tota	I 3	1	0

# 3.9 Nell Lane Collision Statistics (Post-Speed Limit Change)

Nell Lane Recorded Collisions: 2017 - 2018 (12 months			
data)			
(Post-Princess Road Speed Limit Change)			
Route Sectors	Slight	Serious	Fatal
Moss Lane West - Claremont Road	1	0	0
Mauldeth Road West - Princess Road	1	0	0
Princess Road - Burton Road	0	0	0
<u>Tota</u>	<u> 2</u>	0	<u>0</u>

- 3.10 The collision statistics on Princess Road / Parkway, when compared over a 12 month period effectively show no real change in numbers however there has been a reduction in the number of fatal collisions (down to zero) and a small increase in the number of serious collisions.
- 3.11 The collision statistics on Alexandra Road and Nell Lane show a very similar pattern from both before and after the speed limit reduction on Princess Road / Parkway, albeit the numbers are very low which makes any meaningful comparison extremely difficult.

# 4.0 Changes in vehicle volumes and speeds

4.1 The data below captures the number of incidents detected where vehicles were recorded as driving above the posted speed limit. More information is captured in table 4.5 below which shows actual average vehicle speeds.

### 4.2 Princess Road

(Mancunian Way to Princess Parkway/River Mersey) -

- March 2014 April 2017 = 13,960
- May 2017 Dec 2018 = 9,310

### 4.3 Nell Lane

There are no safety cameras on Nell Lane and GMP have no recorded incidents of vehicles exceeding the speed limit

#### 4.4 Alexandra Road / South

Whilst Alexandra Road South has a safety camera in place – this site is there are no recorded incidents of vehicles exceeding the speed limit.

4.5 The table below show the average speeds taken both before and after the introduction of the temporary 30mph speed limit.

			Wee	kday		Wee	kend	
			May - Dec 2016	May - Dec 2017	Change	May - Dec 2016	May - Dec 2017	Change
Princess Road	S	Mancunian Way to River Mersey	21.7	20.1	-1.6	25.3	23.7	-1.7
Princess Road	N	Mersey River to Mancunian Way	22.0	20.2	-1.8	25.1	23.3	-1.8
Alexandra Road/South	S	Moss Lane East to Wilbraham Road	21.4	20.9	-0.5	23.8	24.1	0.2
Alexandra Road/South	N	Wilbraham Road to Moss Lane East	22.1	21.2	-0.9	24.1	23.9	-0.2
Nell Lane	S	Mauldeth Road West to Princess Road	16.6	15.8	-0.9	19.0	18.0	-1.0
Nell Lane	N	Princess Road to Mauldeth Road West	22.4	20.2	-2.3	23.9	21.3	-2.6

### 5.0 Conclusion

- 5.1 The reduction in speed limit on Princess Parkway / Road, appears to have had a positive effect in reducing the severity of collisions, which would correlate with a reduction in the overall speed of vehicles. There does not appear to of been any significant increase or decrease in traffic volumes with no noticeable shift onto other alternative routes.
- 5.2 The number of incidents of vehicles driving above the posted speed limit would appear to be higher since the introduction of the new speed limit, but as previously highlighted there can be a number of variables that can impact on this.
- 5.3 Overall there is a small reduction in the average vehicle speeds on Princess Parkway / Road, but generally these are not significant.

#### 6.0 Recommendations

6.1 Scrutiny Committee is asked to consider the content of this report.