

A review of trends in road traffic and air quality in Southampton 2019-20

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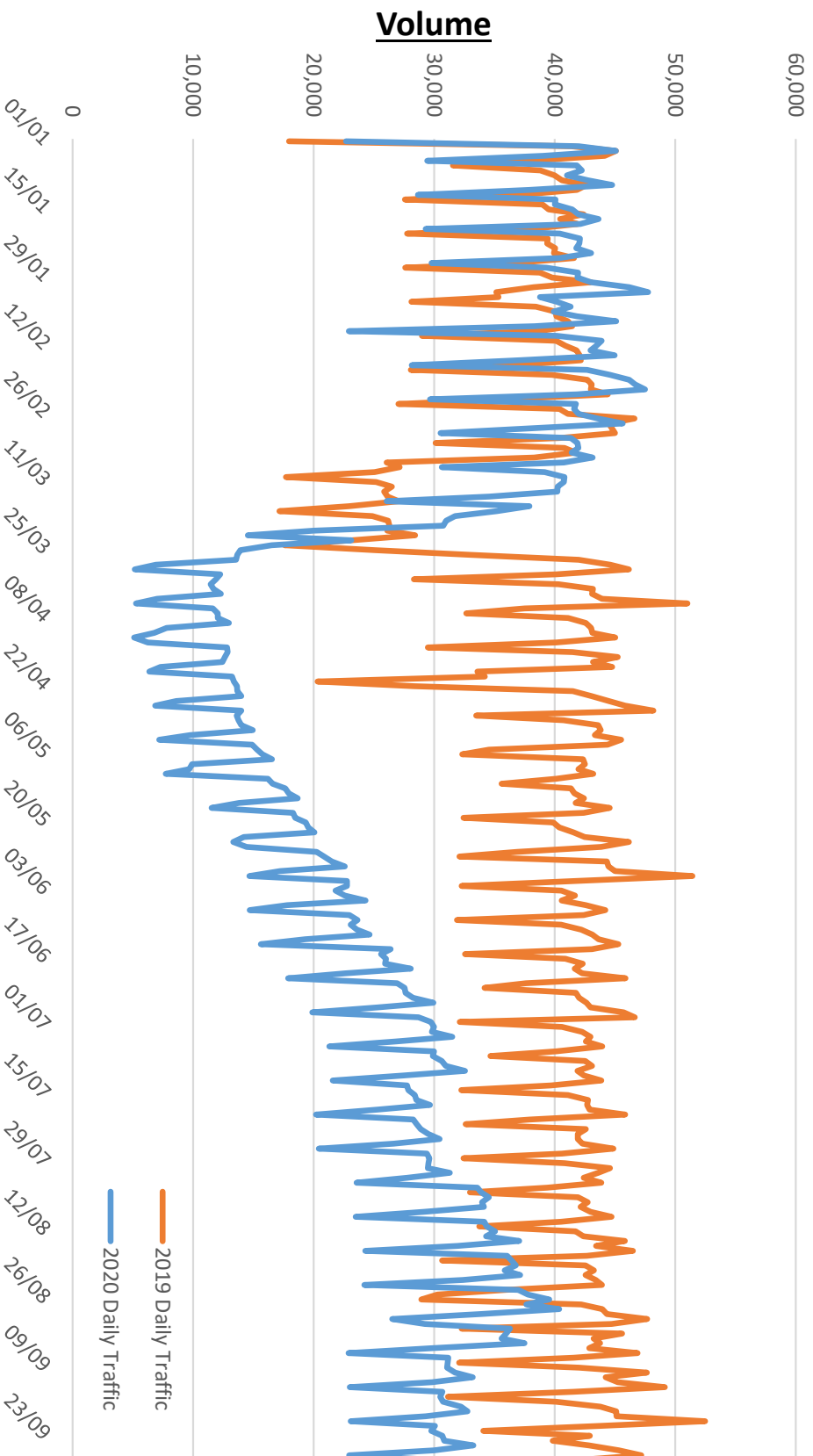
10th November 2020.

Transport Planning Day:

Air Quality in Practice

Traffic Trends: A33 Millbrook

Daily Traffic Volumes - 1 January to 30 September



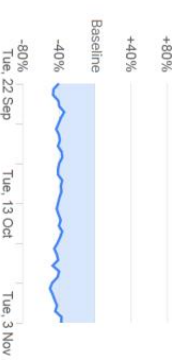
— 2019 Daily Traffic
— 2020 Daily Traffic

	1/1-15/3	16/3-30/4	1/5-30/6	1/7-31/8	1/9-30/9	16/3-31/8	1/1-30/9
2019	36,902	36,526	41,177	41,108	42,220	39,886	39,333
2020	39,889	13,997	19,754	30,616	30,549	22,172	27,900
% change	8.1%	-61.7%	-52.0%	-25.5%	-27.6%	-44.4%	-29.1%

Public transport

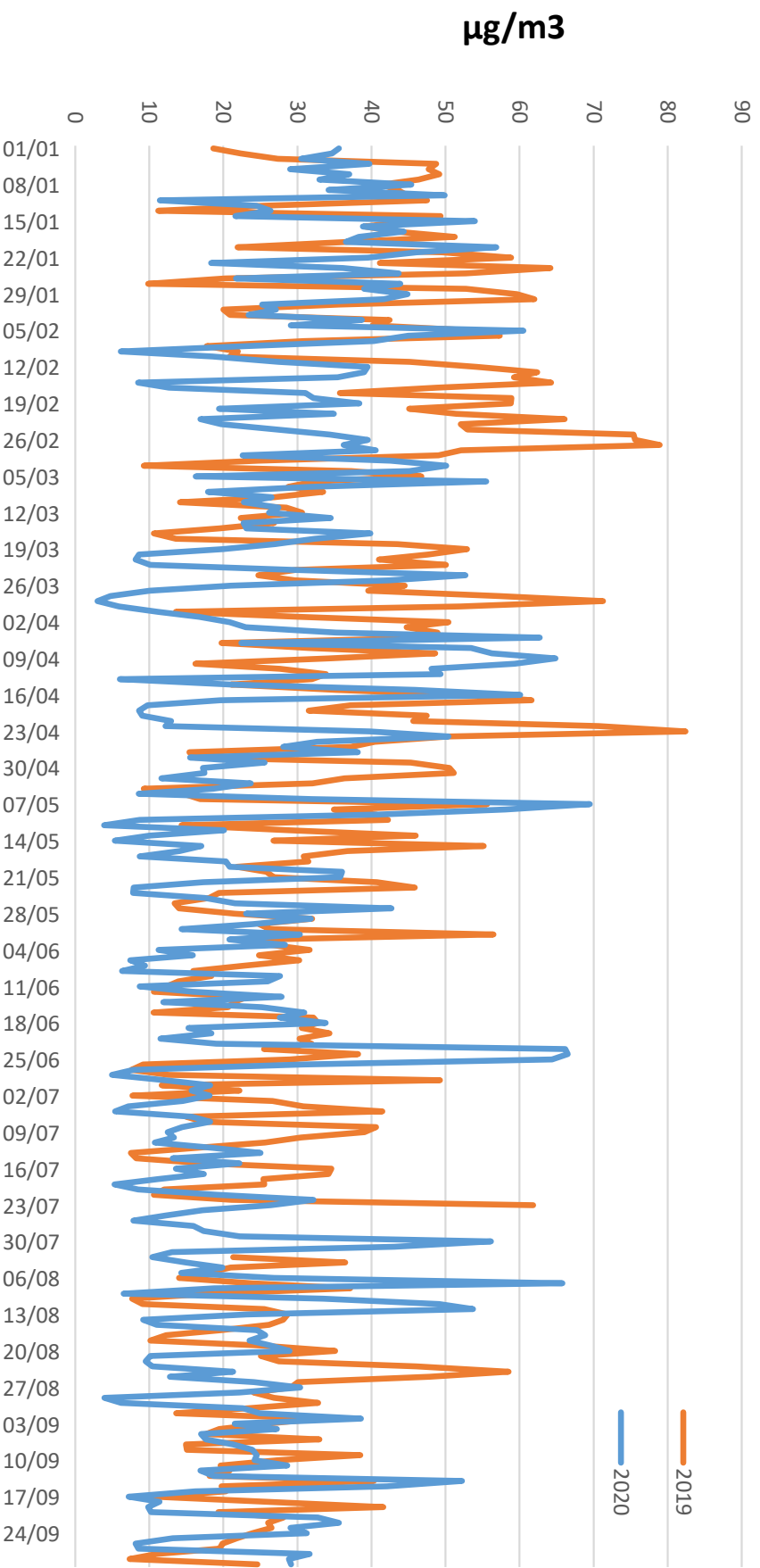
-37%

compared to baseline



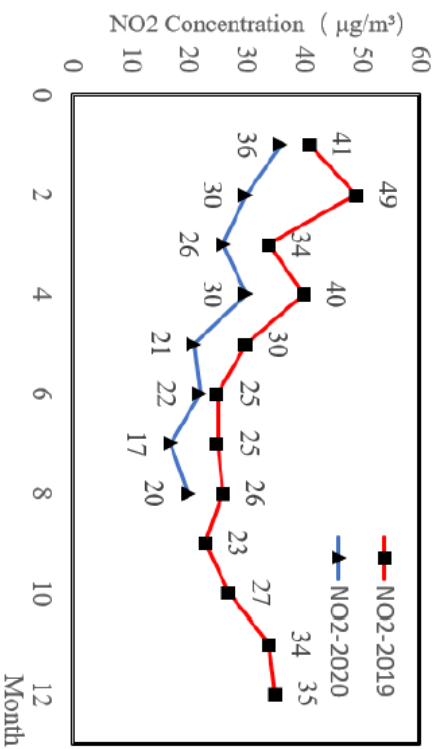
Air Quality Trends: NO₂ A33 Redbridge

Average Daily NO₂ - 1 January to 30 September

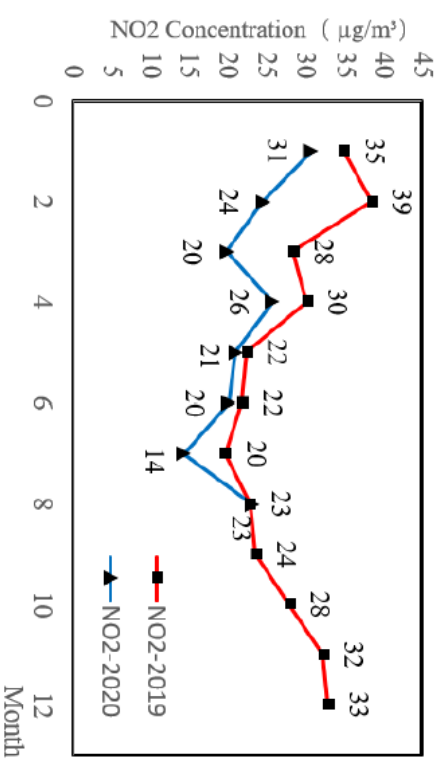


	1/1-15/3	16/3-30/4	1/5-30/6	1/7-31/8	1/9-30/9		16/3-31/8	1/1-30/9
2019	41.38	39.79	27.46	25.67	22.79		30.41	32.62
2020	32.87	28.08	22.79	19.74	23.42		23.11	25.79
% change	-20.6%	-29.4%	-17.0%	-23.1%	2.8%		-24.0%	-20.9%

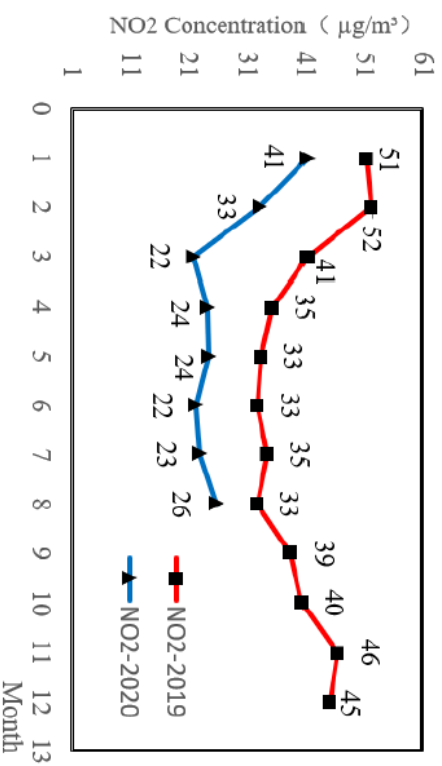
Air Quality Trends: NO₂



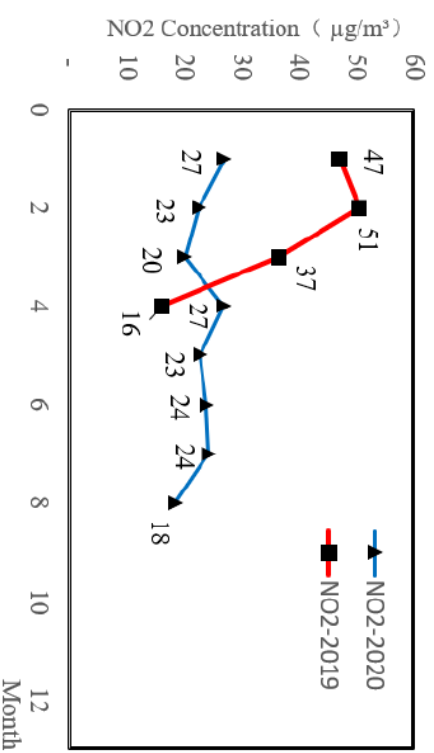
Redbridge AURN



Brintons Road AURN



Onslow Road



Victoria Road

Discussion

- Statistically significant reductions in road traffic levels. Haven't returned to business as usual levels on radials.
- Positive correlation between traffic levels and concentrations of nitrogen dioxide but seemingly negative correlation between traffic levels and PM_{10} .
- Traffic levels have some effects on NO_2 but given the variability of the data, difficult to establish statistically significant improvements in air quality as a result of the lock-down.
- Other factors at play: changing composition of the vehicle fleet, climate (wind direction, speed, temperature), other emission sources, measurement issues.

Concluding Thoughts

- Tempting to think that lock down has ‘solved’ the air quality problem and that compliance with the EU Ambient Air Quality Directive is now more likely to be met.
- However, it seems likely that the ‘new normal’ will involve more workplace activity than currently.
- It might also involve greater dependency on car travel, reduced use of public transport and delays in renewal of the vehicle fleet.
- Air quality may not be a transport planning problem that has gone away.

Workplaces

-37%

+80%

+40%

Baseline

-40%



compared to baseline

Mobility trends for places of work.