

How TSOG Improved Travel, Energy and Future Readiness in Rotherham

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Introduction

- Traffic Signals Obsolescence Grant
- The Bid
- The Award
- Planning
- Design Choices
- Delivery
- Lessons learned
- Benefits
- Summary
- Questions



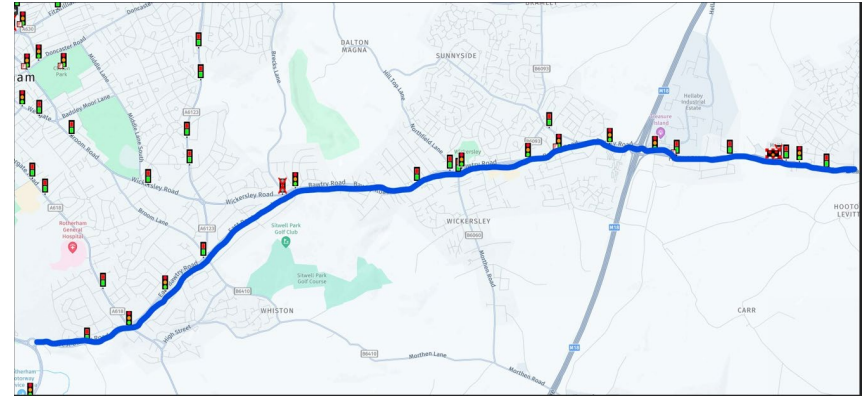
Plan For Drivers

- Traffic Signals Obsolescence Grant (TSOG).
- Aimed at replacing obsolete equipment.
- Green Light Fund (GLF)
- Aimed at fine tuning what is already on the street.



The Bid

- Focus on A631 Key route corridor.
- Support emerging technologies.
- 100% spend on street.
- Complete within 6 months.
- Thanks to Marc Roberts and Andy Knowles.



The Award

- We were successfully awarded the full £500k from DfT.
- Plus £96k from SYMCA
- We committed to spending all the awarded money on the traffic signals equipment.



Department
for Transport

SOUTH YORKSHIRE
SYMCA



Planning

- Upgrade 24 sites.
- 14 sites along A631 corridor.
- 9 funded by TSOG.
- 15 funded by RMBC capital.
- Early Contractor Involvement.



Design Choices - Detection



- MOVA as standard.
- New and emerging technologies.
- Traficam AI for general traffic detection.
- AGD650 for cycle detection and bus priority at bus gates.

Design Choices - Communications

- Obsolete legacy equipment.
- Upgrade to 4G / 5G, Wireless and Fibre.
- High Speed, High Capacity



Delivery

- Challenging rolling programme.
- Engaged with Swarco.
- Placed orders early.
- Secured delivery lead times.
- Committed Resources.



Morrisons - Bramley



Wickersley Roundabout Pt1



Wickersley Roundabout Pt2



West Bawtry Rd – Long Lane

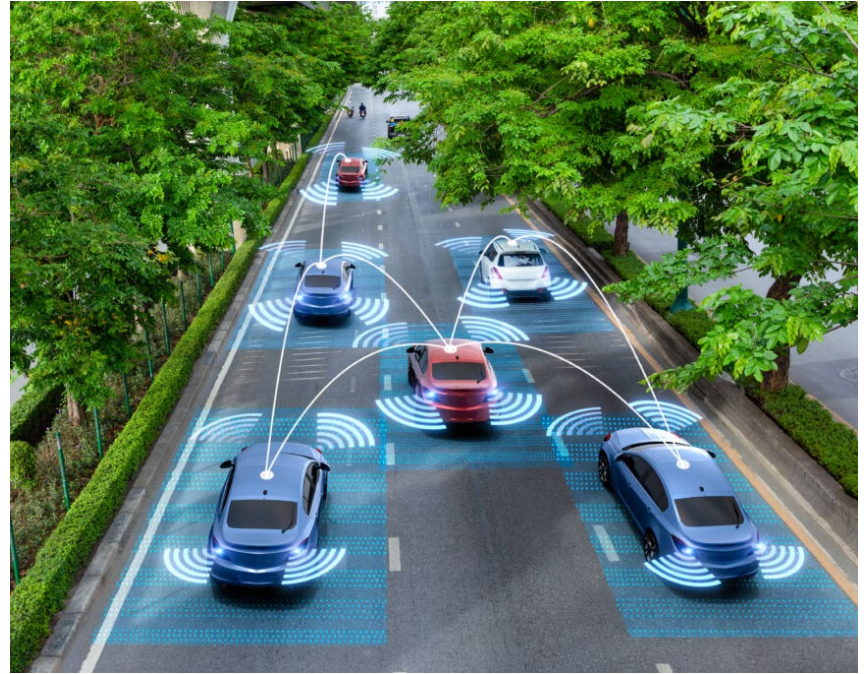


Bawtry Rd – Brecks Crescent



Summary

- Programme finished November 2024.
- On time and on budget.
- Open to being a test bed.
- Blank canvas for new technologies / methods of control.



Credit – AI Times

Lessons Learned

- Concerns about Technology.
- Included 6m poles.
- Drill down more into costs of each sites.
- Early engagement meant we could deliver what we set out on budget.
- Training in using new equipment.
- Tight deadlines.
- Traffic Management costs.

Benefits

Energy Savings and Carbon Reduction

Site	Power Consumption (W)			kWh/Year				Carbon Production / Year (Kg)		
	Historic	Current	Saving	Historic	Current	Saving	£ Saving	Historic	Current	Saving
R015	408	209	-199	3023.97	1656.28	-1367.69	-£382.95	681.45	373.24	-308.21
R051	417	209	-208	3058.91	1656.28	-1402.63	-£392.74	689.32	373.24	-316.08
R065	486	313	-173	3682.6	2392.13	-1290.47	-£361.33	829.87	539.07	-290.81
R071	487	320	-167	3691.36	2453.49	-1237.87	-£346.60	831.85	552.89	-278.95
R104	731	409	-322	5379.74	3108.08	-2271.66	-£636.06	1212.32	700.41	-511.92
R106	871	337	-534	6347.97	2564.84	-3783.13	-£1,059.28	1430.51	577.99	-852.53
R108	716	369	-347	5391.1	2795.12	-2595.98	-£726.87	1214.88	629.88	-585.01
R125	846	411	-435	6285.79	3119.33	-3166.46	-£886.61	1416.5	702.94	-713.56
R127	664	337	-327	4972.94	2564.84	-2408.11	-£674.27	1120.65	577.99	-542.67
R018	433	209	-224	3199.16	1656.28	-1542.88	-£432.01	720.93	373.24	-347.69
R020	159	142	-17	1208.56	1094.07	-114.49	-£32.06	272.35	246.55	-25.8
R023	360	209	-151	2631.45	1656.28	-975.17	-£273.05	593	373.24	-219.76
R103	1475	456	-1019	10826.34	3463.57	-7362.77	-£2,061.58	2439.72	780.52	-1659.2
R121	426	209	-217	3153.5	1656.28	-1497.22	-£419.22	710.64	373.24	-337.4
R068	688	245	-443	5199.02	1946.74	-3252.29	-£910.64	1171.6	438.7	-732.9
R096	772.87	463.58	-309.29	5886.69	3565.21	-2321.48	-£650.01	1326.56	803.42	-523.14
R037	1126.5	466.3	-660.2	8260.38	3536.12	-4724.26	-£1,322.79	1861.48	796.87	-1064.61
TOTAL	11066.37	5313.88	-5752.49	82199.48	40884.94	-41314.56	-£11,568.08	18523.63	9213.43	-9310.24

Funding	
	TSOG
	RMBC
	CRSTS
	S278

Benefits

Journey time savings

- 4% reduction in journey time.
- Pedestrians better served.
- Overall reduction in delay.
- Less stops starts means lower emissions.
- MOVA validation yet to be completed.



INRIX journey time analysis underlines TSOG benefits



by Paul Hutton

Have we inspired the future generation?



- RMBC's Mick Powell and his granddaughters.
- Swarco taking on apprentices to help deliver.
- School visits to new installations

Thank you!



Questions?

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- “TSOG? Completed it mate”