



Sensys Gatso Speed Camera Optimisation

Paul Holschier – General Manager



Sensys Gatso

- Global innovators and trusted experts in traffic enforcement on a mission to save lives by changing the driving behaviour of motorists.
- Reliable hardware, innovative software and high-quality service.
- Working with government agencies globally to find ways to improve driver behaviour.
- Services include:
 - Supply and installation of enforcement solutions
 - Maintenance and upkeep of enforcement systems
 - Back office software to process infringements
 - BOO solutions where we use Opturion to optimise the work plan



The BOO Contract

- Innovative focus on KPIs for enforcement hours
- Multiple types of enforcement, including:
 - Instantaneous speed
 - Average speed
 - Unregistered vehicles
 - Distracted driver
- Freedom for Sensys Gatso to deliver the KPIs efficiently
- Difficult to find a solution that delivers KPIs whilst minimising cost
- Need to display the daily work schedule efficiently to the operators



Customer KPIs

- Total enforcement hours
- Urban/Rural
- Day/Night
- High speed/Low speed
- Weekday/Weekend
- SUV/Trailers



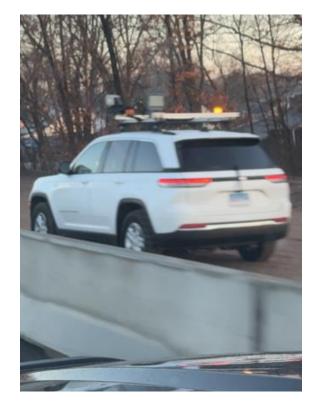




Resources

- SUVs (with an operator)
- Tow vehicles
- Trailers (several types)
- Three depots





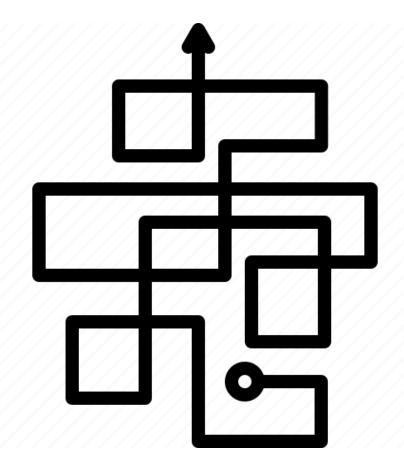




Complexity

- Hours by enforcement type
- Minimum SUV hours
- Mandatory sites
- School zones
- Geographical separation of enforcements
- Complex workflow
 - tow trailer/set up/move/enforce/collect/tow



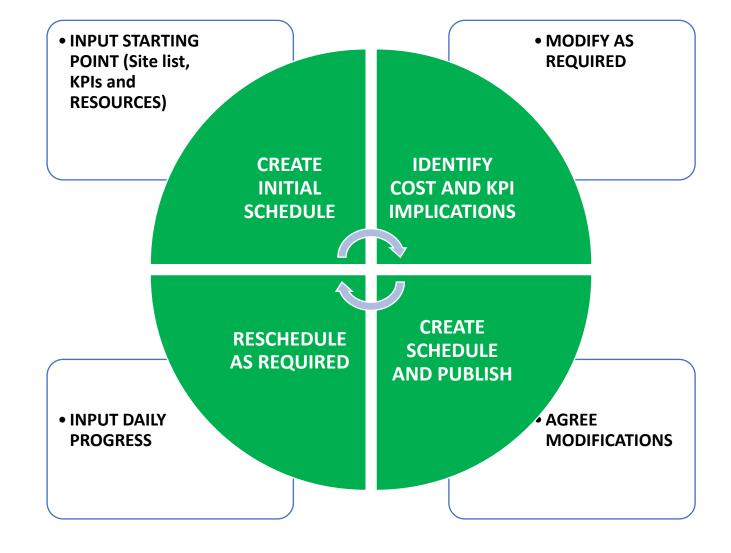




Planning Cycle

- Enforcement periods 28 days
- Obtain client site list (they change each period)
- Create plan:
 - Update inputs (site list, resources by depot, etc)
 - Run Opturion to determine if achievable
 - Make resource adjustments and rerun Opturion
 - Negotiate with client for site list adjustments as required
 - Rerun Opturion
- Submit finalised plan to customer for formal acceptance
- Input the plan into Formbird for day-to-day management during the enforcement period







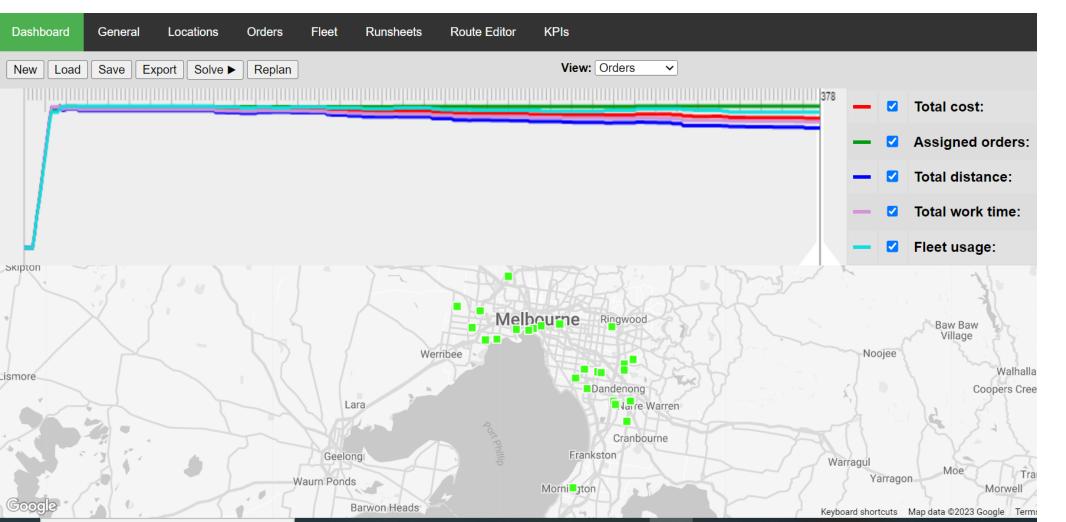
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Screenshots (Illustration Only)

- Dashboard
- Map of potential sites
- Site details
- Resources
- Sample plan
- Route display

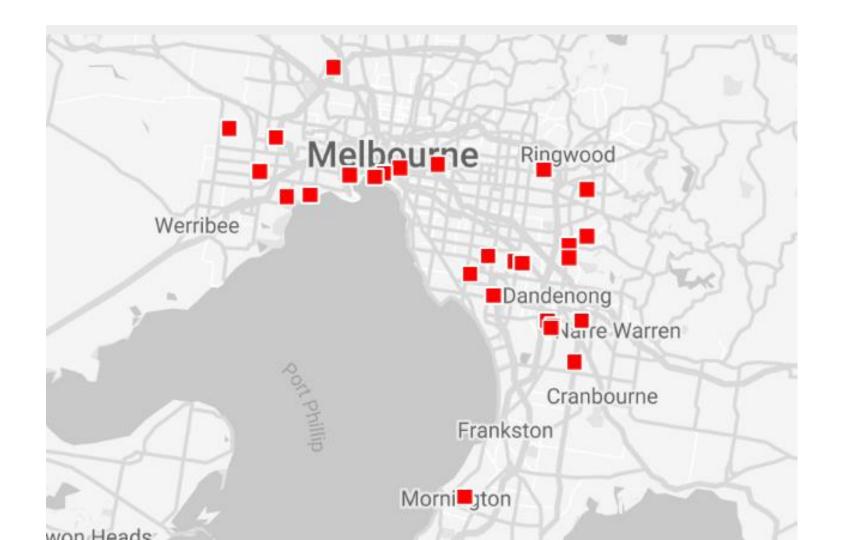
















Dashboard Ge		eral Locations C	Orders F	leet Runsh	eets Route Editor	KPIs		
Shov	v 50 v entries	Show / Hide ▼ Add	d Clone	Edit	ete		Search:	
	ld ‡	Name		A T	Address		‡ Coo	rdinates ‡
	Location_1	Melbourne South RDC			2 Portlink Dr, Dandeno	ong South VIC 3175	-38.05	357,145.22841
	Location_10	Dandenong Industrial Es	state, VIC, Aı	ıstralia	Dandenong, 43-63 Pri	nces Hwy, Melbourne VIC 3175, Australia	-38.00	478,145.23846
	Location_100	Mondelez, Dandenong S	South, VIC, A	ustralia	28 Ordish Rd, Danden	ong South VIC 3175, Australia	-38.01	4362,145.19371
	Location_11	Port Melbourne Industria	al Estate, VIC	, Australia	Port Melbourne VIC 32	207, Australia	-37.83	057,144.92397
	Location_12	Port Melbourne Industria	al Estate, VIC	, Australia	Port Melbourne VIC 32	207, Australia	-37.83	057,144.92397
	Location_13	Port Melbourne Industria	al Estate, VIC	, Australia	Port Melbourne VIC 32	207, Australia	-37.83	057,144.92397
	Location_14	Port Melbourne Industria	al Estate, VIC	, Australia	Port Melbourne VIC 32	207, Australia	-37.83	057,144.92397
	Location_15	Port Melbourne Industria	al Estate, VIC	, Australia	Port Melbourne VIC 32	207, Australia	-37.83	057,144.92397
	Location_16	Key Industrial Park, VIC	, Australia		Bend Rd, Keysboroug	n VIC 3173, Australia	-38.003	381,145.18799
	Location_17	Key Industrial Park, VIC	, Australia		Bend Rd, Keysboroug	n VIC 3173, Australia	-38.00	381,145.18799
	Location_18	Key Industrial Park, VIC	, Australia		Bend Rd, Keysboroug	n VIC 3173, Australia	-38.003	381,145.18799
	Location_19	Key Industrial Park, VIC	, Australia		Bend Rd, Keysboroug	n VIC 3173, Australia	-38.00	381,145.18799
	Location_2	Camerons			33 Stud Rd, Bayswate	r VIC 3153	-37.84	7202,145.24799
	Location_20	Knoxfield Industrial Park	k, VIC, Austra	lia	20 Henderson Rd, Kno	oxfield VIC 3180, Australia	-37.90	2542,145.24791
	Location_21	Knoxfield Industrial Park	k, VIC, Austra	lia	21 Henderson Rd, Kno	oxfield VIC 3180, Australia	-37.90	2542,145.24791
	Location_22	Knoxfield Industrial Park	k, VIC, Austra	lia	22 Henderson Rd, Kno	oxfield VIC 3180, Australia	-37.90	2542,145.24791
	Location_23	Knoxfield Industrial Park	k, VIC, Austra	lia	23 Henderson Rd, Kno	oxfield VIC 3180, Australia	-37.90	2542,145.24791
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Da	shboard Gen	eral Locatior	ns Orders	Fleet R	unsheets Ro	ute Editor	KPIs			
Sho	ow 50 ∨ entries	Show / Hide ▼	Add	one Edit	Delete					
	ld ‡	Start Location	Finish Location	Speed Scale	Earliest Start ‡ Time	Latest Start ‡ Time	Latest Finish ‡ Time	Cost per ‡ Use	Cost per ‡ KM	Cost per ‡ Hour
	Tech_10_Day_1	Location_2	Location_2	60%	00:00	12:45	12:45	1000	2	100
	Tech_10_Day_2	Location_2	Location_2	60%	24:00	36:45	36:45	1000	2	100
	Tech_10_Day_3	Location_2	Location_2	60%	48:00	60:45	60:45	1000	2	100
	Tech_10_Day_4	Location_2	Location_2	60%	72:00	84:45	84:45	1000	2	100
	Tech_10_Day_5	Location_2	Location_2	60%	96:00	108:45	108:45	1000	2	100
	Tech_11_Day_1	Location_2	Location_2	60%	00:00	12:45	12:45	1000	2	100
	Tech_11_Day_2	Location_2	Location_2	60%	24:00	36:45	36:45	1000	2	100
	Tech_11_Day_3	Location_2	Location_2	60%	48:00	60:45	60:45	1000	2	100
	Tech_11_Day_4	Location_2	Location_2	60%	72:00	84:45	84:45	1000	2	100
	Tech_11_Day_5	Location_2	Location_2	60%	96:00	108:45	108:45	1000	2	100
	Tech_12_Day_1	Location_2	Location_2	60%	00:00	12:45	12:45	1000	2	100
	Tech_12_Day_2	Location_2	Location_2	60%	24:00	36:45	36:45	1000	2	100
	Tech_12_Day_3	Location_2	Location_2	60%	48:00	60:45	60:45	1000	2	100
	Tech_12_Day_4	Location_2	Location_2	60%	72:00	84:45	84:45	1000	2	100
	Tech_12_Day_5	Location_2	Location_2	60%	96:00	108:45	108:45	1000	2	100
	Tech_13_Day_1	Location_2	Location_2	60%	00:00	12:45	12:45	1000	2	100

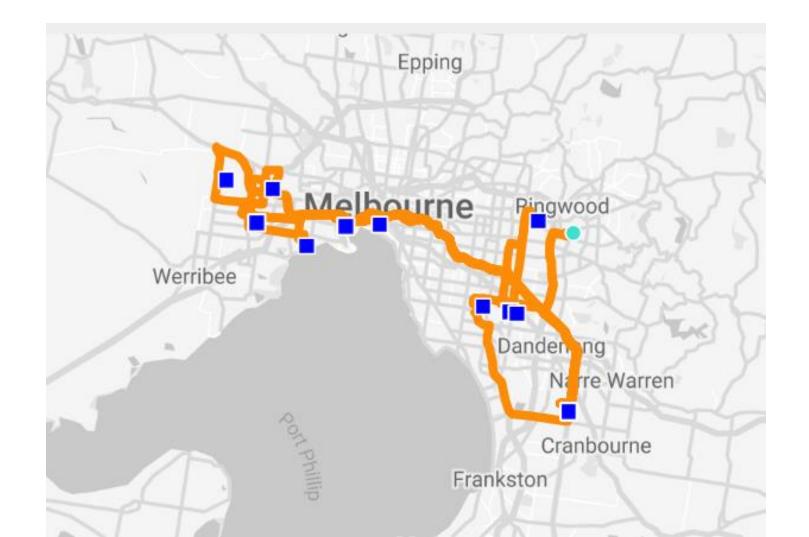
Dash	nboard	General	Locations	Orders	Fleet	Runsheets	Ro	ute Editor k	KPIs
Show	10 🗸	entries							
*	Vel	hicle ‡	Maximum W	eight ‡	Maxir	mum Volume		Actual Start	Time ‡
	Tech_	_1_Day_1	14		14			01:45	

* v	Arrival	Departure	Stop	Order	Location	1	Address
0		01:45	START		Location_	2	33 Stud Rd, Bayswater VIC 3153
1	03:04	03:16	PICKUP	job875	Location_	36	38-40 Aylesbury Dr, Altona VIC 3018, Australia
2	04:48	05:00	DELIVERY	job875	Location_	_1	2 Portlink Dr, Dandenong South VIC 3175
3	05:52	06:00	PICKUP	job982	Location_	_50	1134 Nepean Hwy, Mornington VIC 3931, Australia
4	06:00	06:04	PICKUP	job243	Location_	_51	1135 Nepean Hwy, Mornington VIC 3931, Australia
5	06:55	07:03	DELIVERY	job982	Location_	_1	2 Portlink Dr, Dandenong South VIC 3175
6	07:03	07:07	DELIVERY	job243	Location_	_1	2 Portlink Dr, Dandenong South VIC 3175
7	07:45	08:00	BREAK				
8	08:50	08:58	PICKUP	job104	Location_	_36	38-40 Aylesbury Dr, Altona VIC 3018, Australia
9	09:32	09:36	PICKUP	job253	Location_	69	Hopkins Rd, Truganina VIC 3029, Australia
10	10:30	10:45	BREAK				
11	11:43	11:51	DELIVERY	job104	Location_	_1	2 Portlink Dr, Dandenong South VIC 3175
12	11:51	11:55	DELIVERY	job253	3 Location_		2 Portlink Dr, Dandenong South VIC 3175
13	12:40 FINISH		FINISH		Location_2		33 Stud Rd, Bayswater VIC 3153
0	Tech_2_Day_1		26			26	02:48













Why Optimisation

- Difficult problem to solve (many inputs)
- Ability to change inputs and rerun quickly
- Optimises the operator work shifts to provide full schedule
- Provides a platform to have customer discussion about costs
- Automation removes customer doubt that changes are required

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Why Opturion

- Local support
- Understands problem
- Flexible
- Effective technology
- Responsive support team
- Integrates well with Formbird for presentation of the day-to-day run sheet





Outcomes

- Initial study to confirm resource levels required
- Lowered operating costs
- Deployment in September 2022
- Operating for 15 months
- Changed as new enforcements added and operating model matured
- Scalable for expansion (programme has doubled since go-live)

Questions & Discussion

