

Department of Logistics & Infrastructure

SMUG 2026 Northern Territory

Brendan Joyce
Roads Operation's & Traffic Section
Traffic Signal & ITS Group



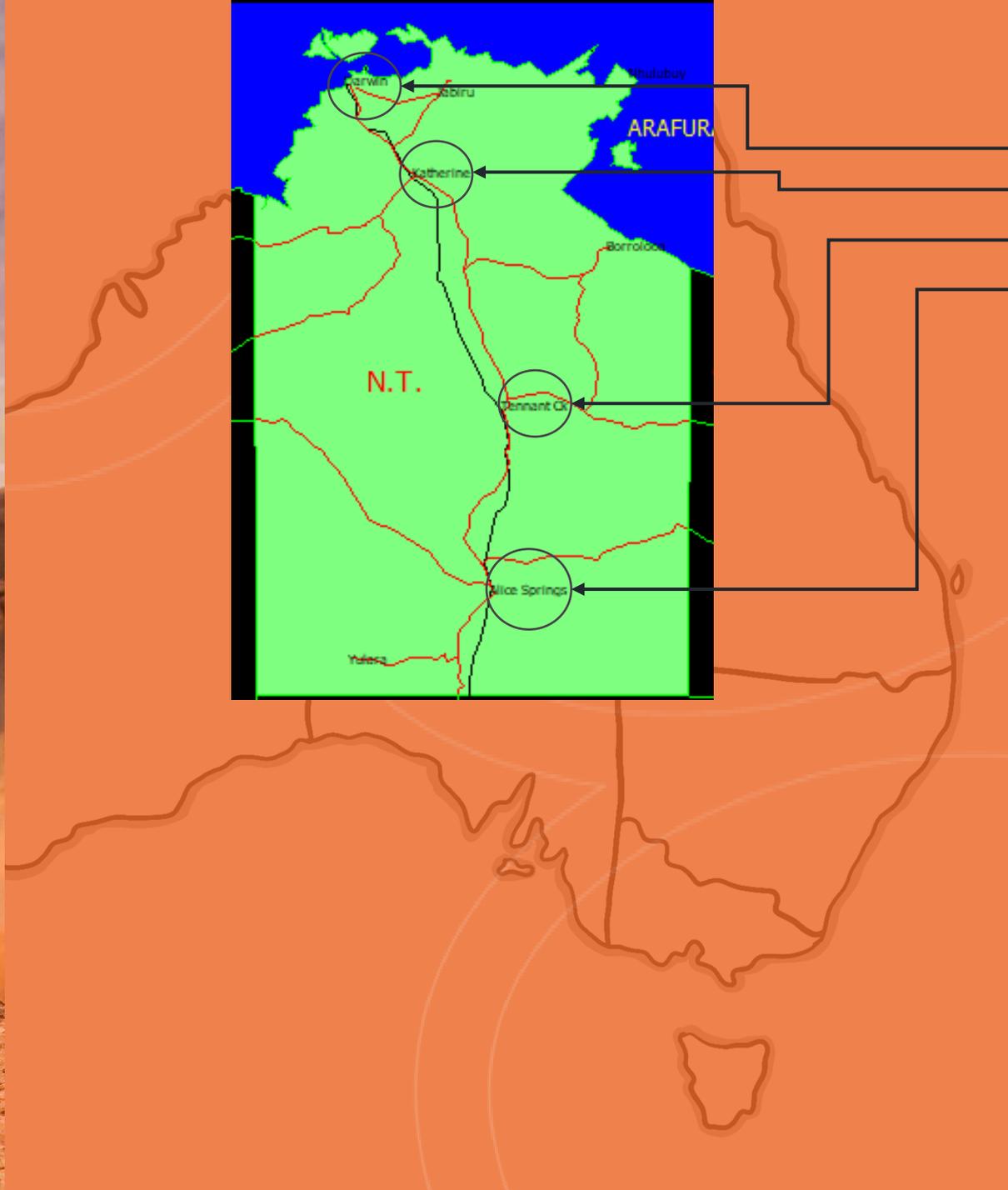
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Current Status of NTG / Council Traffic Signal and ITS network in the NT



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SCATS Sites

Darwin	- 101
Katherine	- 3
Tennant Ck	- 1
Alice Springs	- 10
Total	- 115

Population
NT - 265K
Darwin - 145K

Area - 1.3M square Km
(roughly the size of
France, Spain, and Italy
combined) *173.5 M



Darwin ITS Control Centre "Pseudo" -Combination of Traffic Signal / ITS and Road Operation taskings / staff
Manned weekdays 0630 -1800 with remote on call Road Operation / Tech support using Control Centre in a box (laptop)

Heavy Vehicle Priority ITS system



V.Priority

LOG ACTIVE INTERVENTIONS

- #eb939 400A31@2017 Today 2:17 PM Accepted
- #eb939 400A31@2017 Today 2:16 PM Running
- #8fd81 400A31@2016 Today 2:16 PM Running
- #eb939 400A31@2017 Today 2:15 PM Accepted
- #8fd81 400A31@2016 Today 2:15 PM Accepted
- #d713a 400A31@39 Today 2:13 PM Accepted
- #d713a 400A31@39 Today 2:12 PM Running
- #d713a 400A31@39 Today 2:11 PM Accepted
- #d713a 400A31@39 Today 2:11 PM Accepted
- #Qa529 400A40@2017 Today 2:06 PM Terminated The estimated arrival time (2026-02-05T04:36:25.055) is past the sunset time (2026-02-05T04:36:26.679)
- #Qa529 400A40@2017 Today 2:06 PM Accepted
- #Qa529 400A40@2017 Today 2:05 PM Running
- #Qa529 400A40@2017 Today 2:04 PM Accepted
- #c2e12 400A40@39 Today 2:04 PM Running
- #c2e12 400A40@39 Today 2:02 PM Accepted
- #b6ddc 400A31@39 Today 1:49 PM Accepted
- #b6ddc 400A31@39 Today 1:48 PM Running
- #b6ddc 400A31@39 Today 1:48 PM Preparing



(1) 2008 - Stuart Highway, Howard Springs Road, Lambrick Avenue: Frd (HOWD) - PALM

Find Monitor Subsystem Strategic Monitor AIS-L2008, RIMS-2008; Cameras L7016

2008	Alarms LC LF SI NF CE	PALM Subsystem 8	Degree of Saturation 119
Split Plan 1	Masterlink	Subsystem Plan 1	scats Means Server Ter
Offset Plan 4	Offset 0, 0 ^A	Link Plan 4	Cycle Generator 61
Special Facilities Z3,6		Link none	Active Link none
XSF		Cycle Plan none	Cycle Length 130
		Required Cycle Length 130	

Active Plan

<A>	22%	28
C	20%	26
D	25%	33
E	18%	23
B	15%	20

Site Operation

D	24	8
E	1	30
B		

Active Offset 0 ^A Site Fallback 0
MSS Masterlink

TCS 2008

5 PHASES

LST E TG8
Det 21 Back Half Disconnected 1/5/20 UR
Det 14 & 17 OC removed from mapping bj 18/6/2020

NTG Ship lift project has requirement for large amount of quarried stone from Mount Bundy transiting through the Darwin Urban area to the port.

- Issues found and resolved;
- Dwells during peak traffic flow period
 - Consecutive dwells (within 2 cycles)
 - Green wave ITS vs Dwells (priority level)

Disruption Management ITS system

- Transmax STREAMS Platform been assessed
- Looking to integrate current systems to leverage / integrate data to provide active all of NT system for activities in the road reserve
 - On road incidents
 - Traffic Management / works
 - Road restrictions
 - Traffic Signal

Road Permit management System

- Platform development in conjunction with FOUR
- Current process and document system
- To be developed into full map output
- Road occupancy system component to be added
- Integration into disruption Management system



Thought list / Challenges ☹️

- SCATS development speed (VR35 6 phase)
- Limitation of TRAFF / SCATS
 - emerging technology – Lidar, CCTV AI, Radar (controller manufacture limitations not excluded)
 - alternative algorithms
- Costs for small agency units (scalability)
 - Training (Access, SCATSLearn costs)
 - Application costs / bundles
- ITS integration
 - (Dwells)
 - STREAMS – interface ITS vs user
- Application development – multi-input platform rather than standalone applications
- ITS port Update / costing
- NGEN development