



TRAFFIC MANAGEMENT CENTERS

Definition: <u>Traffic Management Centers</u> have two key operational functions: real-time active monitoring and coordination, and traffic management strategy implementation. These functions are accomplished by both staff and systems. TMCs provide a safer transportation system for users by being both responsive to incidents and innovative in technologies to accomplish that goal.

Systems. Hivies provide	What is placing us	in our current tier?	What is keeping us from advancing to the next tier?	
	Current Traffic Management Centers include the Statewide Traffic Management Center (Columbia), SCDOT District 6 TMC (Charleston), and City of Charleston Traffic Management Center		 Limited funding for TMC Operations, with no SCDOT funding beyond interstate operations Limited documentation or standardized processes for local TMC operations 	
	(Charleston).		Systems engineering process not fully mainstream	
	SCDOT manages interstate travel solely.		Agency decisions not driven by performance measures	
	CCTV cameras provide surveillance capabilities.		Challenges around staff retention and training. Unclear roles and few full-time staff dedicated to	
	Some processes are documented but the documents are outdated.		ITS at the local level.	
	Statewide ITS Architecture is from 2015 and systems engineering process is applied sometimes.		SCDOT has ITS staff and funding, but funding and staffing does not provide for growth.	
	Local TMC has staffing shortages.		Agencies primarily focus on the TMC role for specific events.	
	Interagency collaboration is minimal.		Limited capacity in staffing and experience to fully recognize benefits of TMC coordination across	
			multiple agencies.	
	Level 1 (Ad-hoc)	Level 2 (Managed)	Level 3 (Proactive)	Level 4 (Fully Collaborative)
Business Processes	Ad-hoc planning for TMC functions, vision not	Some planning for asset management; processes	TMC operations needs captured in budget,	TMC vision is integrated in all aspects of DOT
	well defined; TMC processes specific to SCDOT	for specific corridors or region, but not consistent	standardized processes, consistent review/update	business; Planning for Operations is standard
	are not documented	statewide; some TMC processes documented	of TMC strategic direction	practice; asset lifecycle cost is part of five-year programming processes; processes are regional
Systems and	Ad hoc approaches to system implementation;	Some elements of SE are used, including ConOps,	Systems, technology standardized and integrated	Architectures and technology routinely upgraded
Technology	systems engineering (SE) not applied consistently;	architectures, developed and documented with	on a regional/corridor basis; statewide SOPs	to improve performance; systems integration/
81	procurement processes; ITS architecture is	costs included; TMC monitors some field systems;	updated used; integrated statewide network; SE	interoperability maintained on continuing basis;
	outdated; individual systems that are not	SE process applied to some aspects of TMC	process is mainstreamed into TMC business	Strong support for adopting advanced
	integrated	operations; some emerging technology	practices; integrated systems	technologies
		considerations		
Performance	Some outputs measured and reported for some	Some elements of TMC performance are tracked	Performance outcomes guide recommend	Operational decisions based on multi-
Measurement	aspects of TMC operations; typically, historical	and reported; focus is primarily on usage/activity	operational improvements; real-time data	jurisdictional real-time information; performance
	performance information	reports assessing trends; some real-time data is used for operational decision-making at the TMC	routinely used for decision-making; TMC uses some real-time data from other centers/sources	management strategy guides innovation at the TMC.
Culture	Individual staff champions promote operations;	Role of TMC acknowledged but connection to	TMC is a core program, region values TMC role	TMC highly integrated with many processes,
	TMC operations priorities based primarily on	core ops areas is not always recognized; TMC	and input to key processes, TMC operating needs	region sees TMC as a valuable asset, high value on
	champion focus areas; TMC not often included in	engaged in pre-planning for WZ, TIM and PSE	factored in early as part of other	TMC data
	work zone (WZ) or event planning, incident	based on individual relationships	planning/scoping decisions	
	debriefing, etc.			
Organization and	Individual staff champions promote operations;	Core KSA's identified and help support TMC	TMC career path is clearly defined; established	Commitment to ongoing training and professional
Staffing	TMC functions learned mostly OJT; career path	ConOps; roles for in-house and contractor staff	and successful training program; performance	development; strong retention of staff due to
	for TMC is limited and not well defined	are defined; some training, but limited external	standards are clear and documented; good	career path and advancement opportunities;
		training opportunities; communication between	communication between staff and contractors	strong and well-known performance standards
		DOT and contractors is fragmented and event-		
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Collaboration	Relationships ad hoc, and on personal basis	Collaboration with external partners is formal,	Multi-agency and coordinated operations for	Multi-agency response strategies are
	(public-public, public-private)	and usually driven by specific needs, TMC roles still fragmented and event-based; real-time	planned events; some partnerships for key corridors; TMC role defined and understood	mainstreamed into TMC operations; operating processes and procedures documented and used
		collaboration with public safety for incidents	corridors, rivic role defined and understood	frequently
Service Layer Actions to Advance to Next Level				