

TMC Weather Integration Self-Evaluation and Planning Guide

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Supporting TMCs in Achieving Higher Levels of Weather Integration

- The Self-Evaluation and Planning Guide is available for download at:

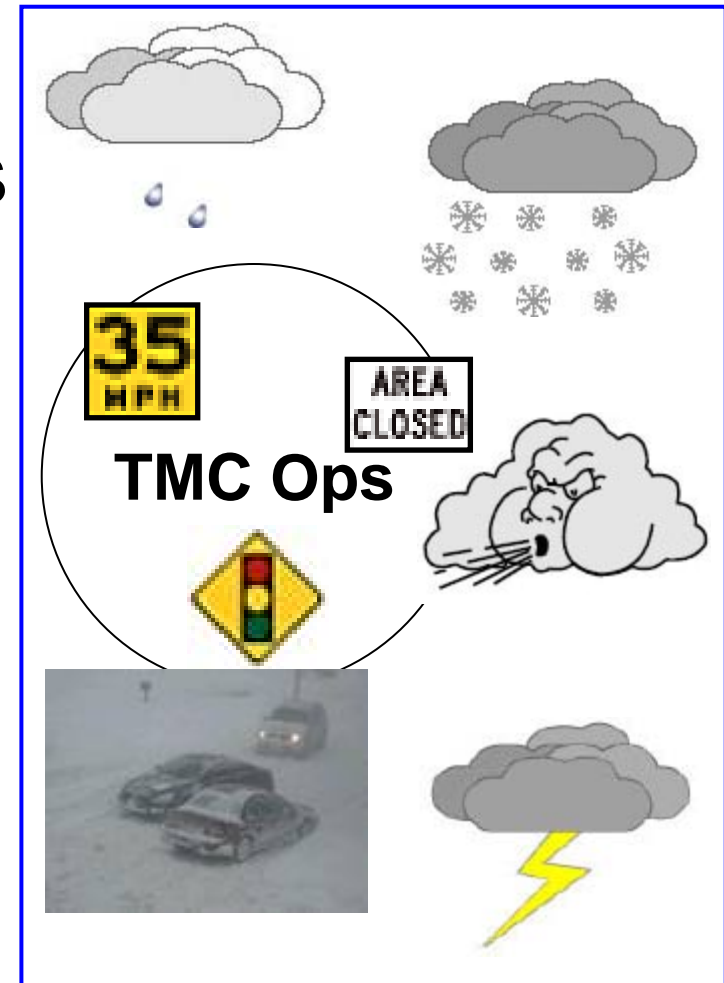
<http://www.ops.fhwa.dot.gov/weather/tmctool/registration.htm>

- Steps in the Process:

Self-Evaluation ➡ **Integration Plan** ➡ **Plan Implementation**

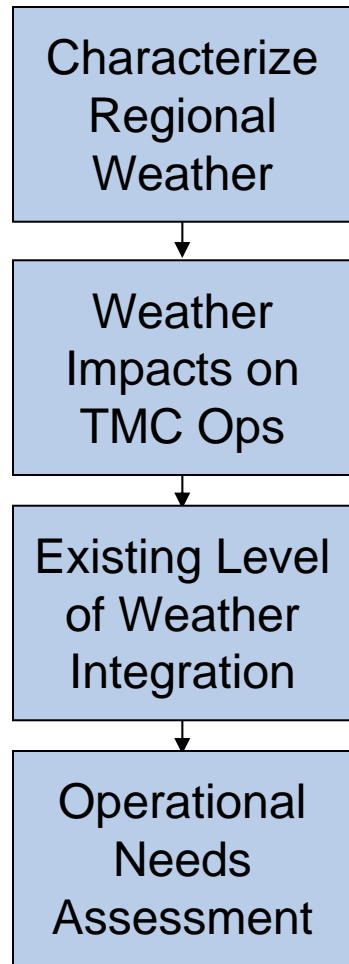
Weather Integration: What is Involved?

- Identifying Wx conditions
- Understanding Wx impacts
- Current level of Weather integration
- Identifying TMC needs for weather information
- Identifying and selecting available Wx integration strategies



Flow-Chart for the Self-Evaluation Guide and Weather Integration Plan

Step 1: Self-Evaluation



Step 2: Identify Candidate Weather Integration Strategies

Adjust Need Priorities
and Consider Alternative
Strategies

	Operational Needs			
	1	2	3	4
Strategy #1	X			
Strategy #2		X		
Strategy #3	X	X		
Strategy #4			X	
Strategy #5		X		X

Step 3: Develop Weather Integration Plan Based on the Selected Weather Integration Strategies

Examples of Weather Integration in TMC Operations

- Increased internal weather information resources (e.g. camera imagery, use of satellite and ASOS data, etc.)
- Increased use of external weather information and forecasts
- Expanded availability of weather information
- More frequent weather forecasts (occasional to continuous)
 - Level 1 Cable channel or subscription weather information vendor providing general weather information
- Us
- Gr Level 2 Internet provided weather radar or satellite image on video wall
ma
- Mc Level 3 Field observers or ESS network providing scheduled road or driving condition reports
- Cl Level 4 Vendor provided daily surface transportation weather forecasts and observed weather conditions
- Au
- Gr Level 5 Meteorologist, located within TMC, forecasting and interpreting weather

Weather Integration Matrix: Where You Are Now

The current level of weather integration will vary for each item of integration.

		Integration Levels					
		-	1	2	3	4	5
Items of Integration	1						
	2						
	3						
	4						
	Etc.						

Identify TMC Operational Needs for Managing Weather

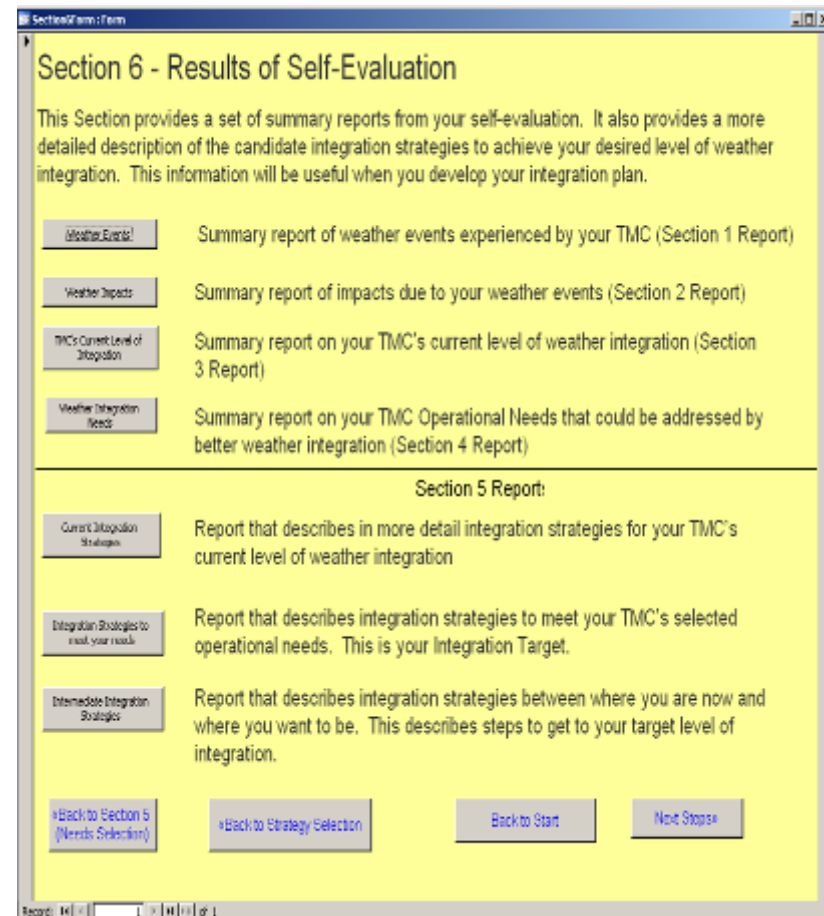
- 22 “needs statements” in five categories:
 - Weather information gathering
 - Institutional coordination
 - Advisory functions
 - Control functions
 - Treatment Functions
- Example need statement:
 - Better short-term forecasts of arrival time, duration, and intensity of specific weather events at specific locations
- Ranking of needs by priority (high, medium, low)

Identify Candidate Integration Strategies Suitable for the TMC

- A structured pathway to meet needs
 - **Maps integration strategies that minimally address each identified operational need**
 - **Clearly points to the next several higher levels of integration above current levels**
 - **Allows selection of an integration strategy below what would be required to fully address the need as an interim pathway to meeting that need**

The Guide provides detailed information for the selected Integration Strategies

- Information on strategies include
 - Detailed definition
 - Relative complexity and costs (high/medium/low)
 - Requirements to implement each strategy



RWMP Currently Supporting Selected TMCs

- Over the past two years selected TMCs are:
 - Conducting self-evaluations
 - Developing weather integration plans
 - Implementing the plans
 - Providing feedback to improve the Guide
- The RWMP is evaluating the effectiveness of the implementations, and seeking to promote the benefits of integration

Experiences of Four TMCs

Brian Simi, Caltrans District 3 Regional TMC and
Mark Heiman, Sacramento Area Council of
Governments

Michael Muffoletto, representing 4 Louisiana TMCs

Robert Helt, Colorado Springs, CO TMC

Vince Garcia, Cheyenne, WY TMC

- Each TMC is facing unique weather challenges and integration opportunities
- Each TMC is at a different point in the process