DEPARTMENT OF TRANSPORTATION

Asset Management Program Office
395 John Ireland Blvd.
St. Paul, MN 55155

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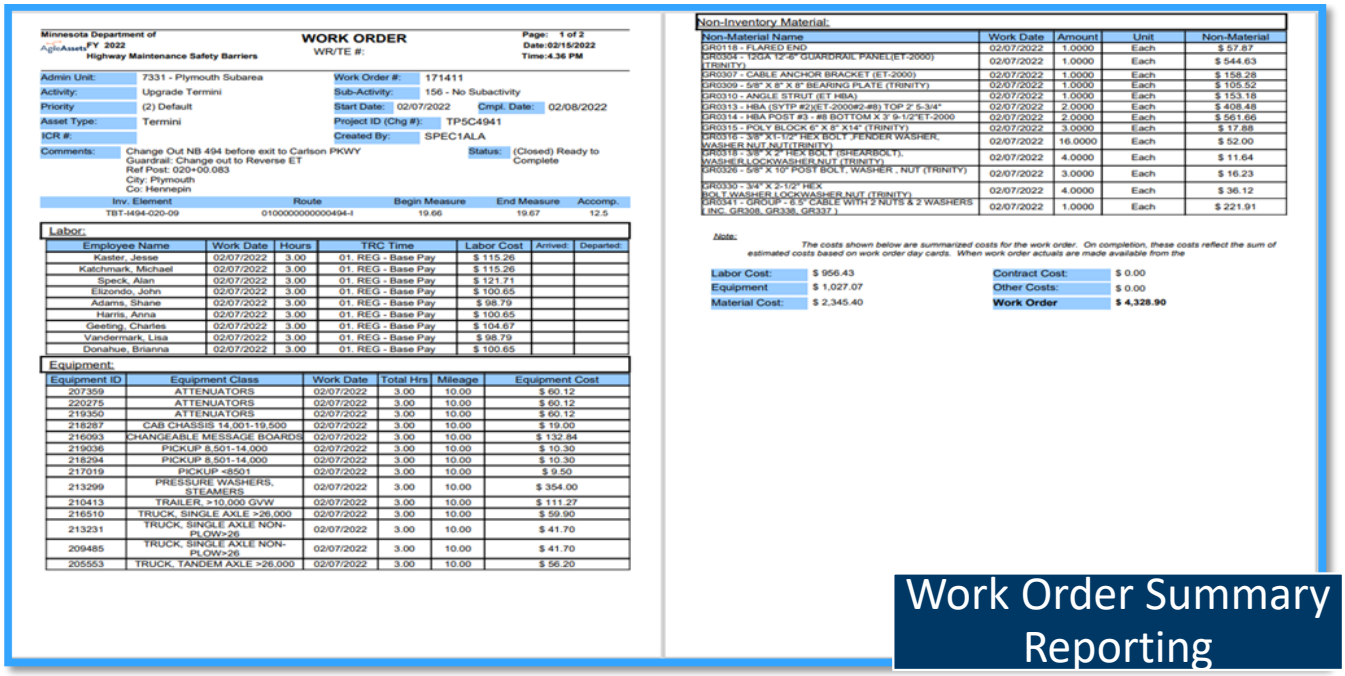
Asset Management for Business Support/Administration Staff

The demands on our agency continue to grow; increased traffic, increased system size and complexity, cost inflation, increased system aging and deterioration, and increased public expectations. Resources are not keeping up, making it harder and harder to meet all the needs.

MnDOT needs to optimize its use of resources, have compelling data to be able to show its costs and productivity, and articulate its prioritization strategies to optimize management of the infrastructure, but also show objective financial and human resource gaps in its ability to do so.

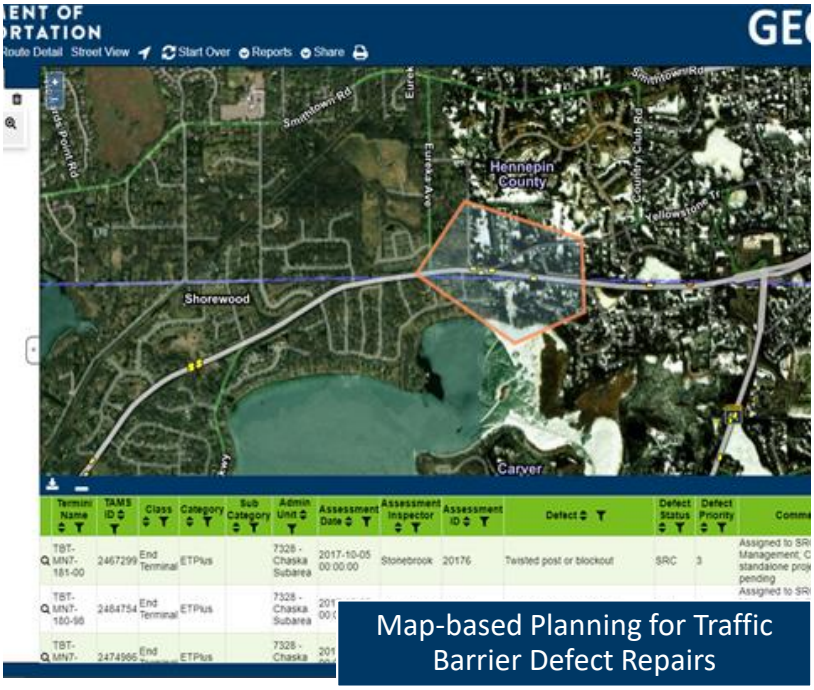
Did you know that several Business Services and Administrative roles in a typical district can have an impact on MnDOT's Asset Management effectiveness?



To meet the demands of this complex situation, asset management principles rely on good data such as asset inventory and inspection information, and tools such as the TAMS (Transportation Asset Management System) to improve management efficiency. This is important over both the short- and long-term.

Count of Assessment Defect S	Column Labe			
Row Labels	Maintenance Fixable	Agency	SRC	Grand Total
7312 - Anoka Subarea			421	421
7313 - Maple Grove Subarea			966	966
7314 - Spring Lake Park Subarea	9		1437	1446
7315 - Golden Valley Subarea			1079	1079
7316 - North Branch Subarea			258	258
7317 - Forest Lake Subarea			497	497
7321 - Mendota Heights Subarea			2185	2185
7324 - Hastings Subarea			798	798
7325 - Lakeville Subarea			748	748
7326 - Jordan Subarea			18	18
7327 - Shakopee Subarea			447	447
7328 - Chaska Subarea			1444	1444
7331 - Plymouth Subarea			1304	1304
7332 - Eden Prairie Subarea			1494	1494
7333 - Maryland Subarea			2135	2135
7334 - Oakdale Subarea			1502	1502
7335 - Camden Subarea			1061	1061
7363 - Cedar SubArea			3006	3006
9120 - Shore Subarea	1717		1172	2889
9121 - Duluth Subarea	930	14	476	1420
9122 - Lakes Subarea	1087	19	688	1794
9124 - South Subarea	1961	42	673	2676
9150 - Range Subarea	936		335	1271
9151 - Border Subarea	560		198	758
9266 - North West Subarea	81		434	515
9267 - South West Subarea	93		299	392
9268 - North East Subarea	96	10	322	428
9269 - East Central Subarea	228		503	731
9270 - South East Sub				
9342 - Subarea Aitkin				
9348 - Subarea Baxter				
9350 - Subarea Little F				
9370 - Subarea River				

Subarea summary for Traffic Barrier Defects



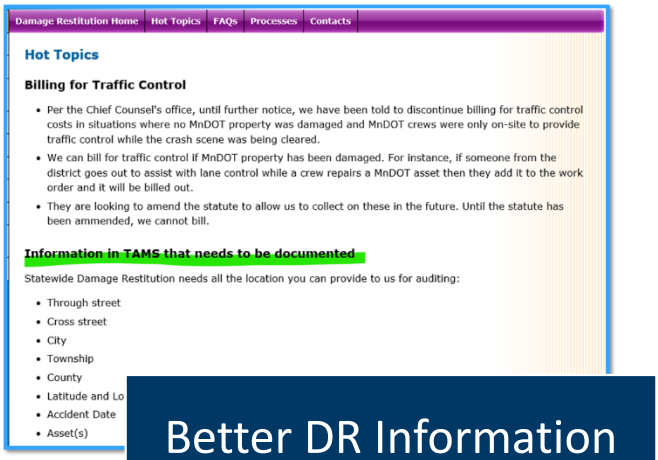
Map-based Planning for Traffic Barrier Defect Repairs

MnDOT believes it is vital to practice and continue to advance Transportation Asset Management because TAM:

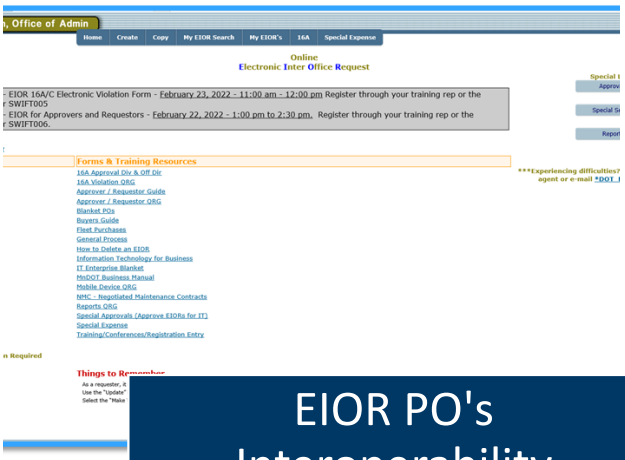
- Is a performance-based approach that uses agency goals and objectives to drive resource allocation. Asset management relates resource needs to the construction, maintenance, and operation of transportation infrastructure assets.
- Enables transportation agencies to improve accountability, decision-making, and coordination between maintenance and capital programs and better manage the available funding.

The collection, management, and analysis of quality asset inventory and condition data is a critical part of asset management. Asset management implementation benefits from well-planned information technology systems that consider the decision-making processes that agencies use to keep assets operational and safe.

MnDOT made a strong commitment to managing our assets by adopting an Asset Management Strategic Implementation Plan, which sets a departmental vision (and set of strategic objectives and action plans). In other words, MnDOT is committed *"to effectively manage transportation assets by mitigating risk, optimizing return on investment, and using the best available information and tools."*



Better DR Information



EIOR PO's Interoperability

Collaborating

Maturing Administrative Functions in Asset Management at MnDOT

Administrative staff such as Fleet Managers, Materials Managers, Finance/Accounting and other professionals play a critical role in the asset management picture. Over the past several years, MnDOT has added 1.2 million elements to its asset inventory database. In the past, the best asset management cost data MnDOT had was through an assignment of resources (through RCA) to a generalized type of activity performed somewhere within a "Project ID" (which might have been a road segment 30 miles long!). Now the TAMS system, with uniquely identified individual assets, integrations with SWIFT, RCA, numerous other systems, and map supported work order functions allows for accurate labor, equipment, and materials costing down to a single inventory element such as a culvert or sign. This is much more useful information!

Costs (and accomplishments) are tracked through the use of work orders in TAMS. When a work order writer assigns labor, the employee data comes from SEMA4, when assigning equipment, the data comes from M5, and when assigning materials, the TAMS system looks first for the material in the SWIFT inventory items. If the item is unavailable, the user must select a more generic, manually maintained version, with statewide average costing. There are numerous ways local costs deviate from statewide averages; these are captured when materials move through the system of record – SWIFT, but not when the generic list is used. This even affects the recovery that districts receive through the restitution process.

Inventory staff can have a major impact on MnDOT's costing accuracy. To the extent that materials are received specifically via SWIFT item numbers, TAMS will reflect accurate district costing. While this is not practical for all commodities, it is beneficial where possible.

As we are able to more closely tie materials consumed to work performed, districts will be better equipped to understand their costs and estimate materials needs and budgets based on Maintenance Work Plans.

Some districts have had good success setting up "Consigned Inventory" centers which place the control and documentation for items in equipment yards or similar under the responsibility of field personnel who are better able to account for things such as hydraulics, guardrail and other bulky items.

Damage Restitution and Payroll personnel are primarily *consumers* of asset management related TAMS work order information. However, their role allows for flagging of errors or anomalies if they are noticed. Also, Payroll and Financial staff will likely be affected as the department moves toward TAMS for Bridge and Snow and Ice activities as RCA nears retirement.

As MnDOT moves toward making district funding distribution decisions based in part on data from the TAMS system, it is clear that good data is important, and even though those with administrative roles aren't patching roads, or replacing signs, they can contribute substantially!