



## STATE OF GOOD REPAIR

An end treatment is in a State of Good Repair (SOGR) when it is replaced with MASH Compliant infrastructure or determined to be outside of clear zone.

## TARGETS AND MEASURES

### Measures:

| Rank | Cond                             | AADT         | Speed |
|------|----------------------------------|--------------|-------|
| 3    | Good/Easy Retrofit               | 0-5,000      | < 30  |
| 2    | Dented/Needs Full Replacement    | 5,000-10,000 | 30-45 |
| 1    | Wood, Heavy Damage, or Corroding | 10,000+      | > 45  |

Priority = Average(Condition + AADT + Speed Limit)

### Targets:

- 100% in SOGR

## BARRIER END TREATMENTS

This SOGR summary applies to the following guardrail end treatment types:

- Turned-down Ends (wooden)
- Twisted Ends (metal)
- Buried ends (not many in inventory)

### Annual Budget:

Currently, there are no explicit budget costs for end treatments. Safety funds from both state and federal contracts are used to replace end treatments.

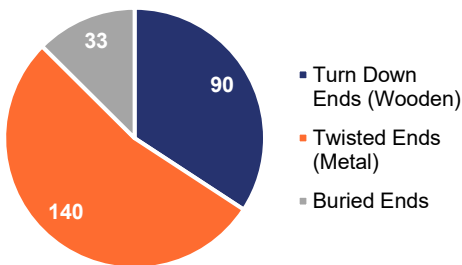
### Asset Valuation:

Replacement costs are approximately \$55K per Buried and Twisted end treatment and \$110K per Turned Down end treatment.

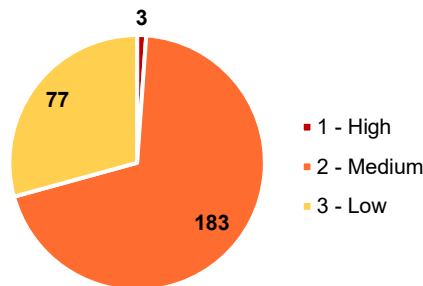
## INVENTORY & CONDITION

### Non-Compliant End Treatment Inventory Summary: 263 end treatments

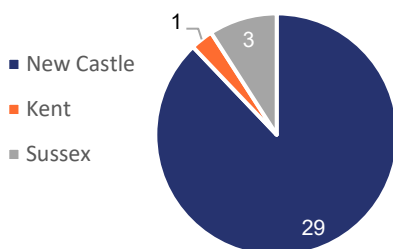
Total Inventory Summary



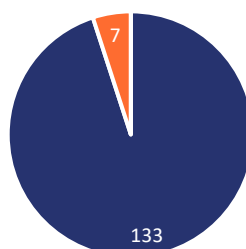
Total End Treatments by Priority



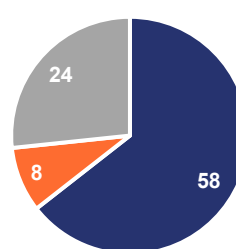
Buried Ends by County



Twisted Ends by County



Turn Down Ends by County



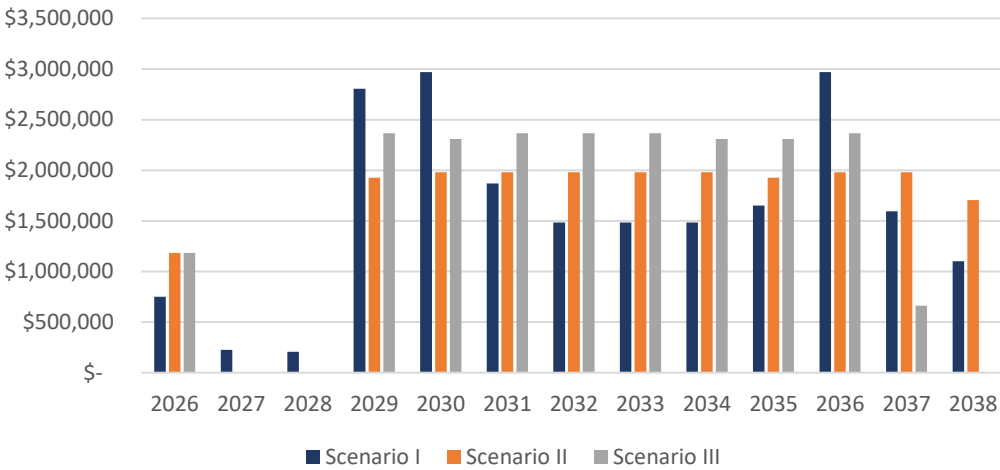
| County             | #   | \$ to Replace |
|--------------------|-----|---------------|
| Buried and Twisted |     |               |
| New Castle         | 162 | \$8.91M       |
| Kent               | 8   | \$0.44M       |
| Sussex             | 3   | \$0.16M       |
| Turned Down        |     |               |
| New Castle         | 58  | \$6.38M       |
| Kent               | 8   | \$0.88M       |
| Sussex             | 24  | \$2.64M       |
| Total              | 263 | \$19.41M      |



# PERFORMANCE PROJECTIONS

The following charts look at three scenarios, one based on replacing an even % of the inventory, and two based on level annual funding. The first three years of each scenario only contain design and right-of-way costs.

Annual Projected Spending by Scenario



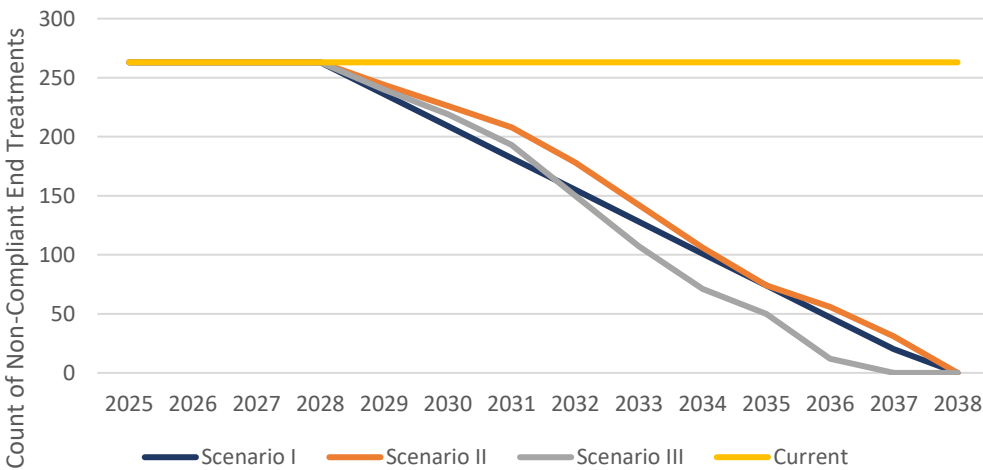
**Scenario I** – ROW costs in year 1. 33% of assets designed across years 2026-2028. 10% of the inventory is replaced each year from 2029-2038.

**Scenario II** – ROW and design costs all in year 2026. Annual budget of \$2 million.

**Scenario III** – ROW and design costs all in year 2026. Annual budget of \$2.4 million.

**Current** – There is not an existing budget dedicated to end treatment replacement. Inventory is static through the analysis period.

Remaining Inventory by Scenario



## POTENTIAL RISKS

**Financial:** There is currently no funding allocated, and time is needed for design. Funding types and sources are uncertain which could require additional time for development.

**Inventory:** The lack of a complete inventory poses a risk to the program, which could lead to financial losses due to unaccounted assets. Over time, this risk may escalate, potentially resulting in higher costs and more severe compliance issues.

**Material availability:** Material availability may increase lead times and costs for implementing new infrastructure and repairing/replacing existing assets as needed.