DELAWARE DEPARTMENT OF TRANSPORTATION – 2024

LONG LINE PAVEMENT MARKINGS

STATE OF GOOD REPAIR

Pavement markings that are reflective and visible to drivers in nighttime or stormy conditions are considered to be in good repair. Inspectors drive state roads every winter doing a visual inspection of reflectivity at nighttime in order to develop the maintenance plan for the coming year.

Pavement markings that are still in their useful life are considered to be in a state of good repair.

TARGETS AND MEASURES

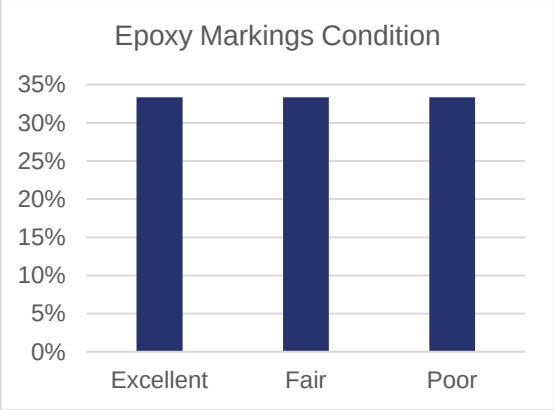
Epoxy markings have a useful life of 3 years
Age = 1 – Good
Age = 2 – Fair
Age >=3 – Poor

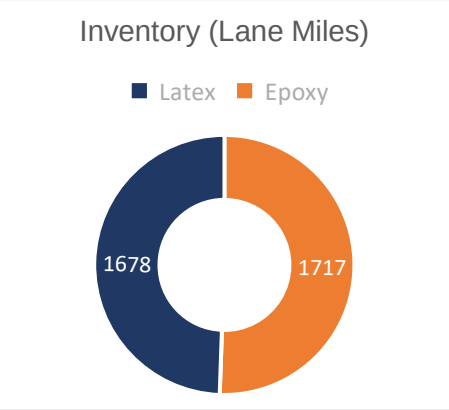
Latex markings have a useful life of 1 year
Age <= 1 – Good
Age > 1 – Poor

Total Target % Good > 65%

Total Target % Poor < 20%

INVENTORY & CONDITION





Epoxy Markings are on a 3-year life cycle. 1/3 of the state inventory is re-applied each year on the current maintenance plan. The state inventory is maintained using an ArcGIS mapping system.

AGE DISTRIBUTION

Similar to the chart above, epoxy markings range in age from 1-3 years old (approximately 33.33% in each category). Latex markings are refreshed on a yearly basis.

Description:
DelDOT is responsible for managing approximately 6,414 directional centerline miles of state-maintained roadway. The Pavement Markings program manages all of the striping and pavement marking symbols on these roads. They include long lines (i.e. lane/shoulder lines), short lines (i.e. dashes), symbols, and raised pavement markers.

Epoxy Markings: Maintained by re-applying markings once every three years. Cover 1/3 of state per year.

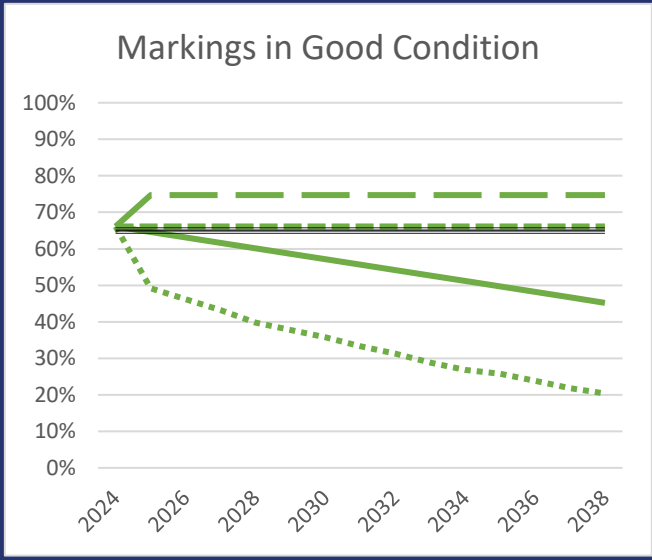
Latex Paint Markings: Maintained by re-applying once per year.

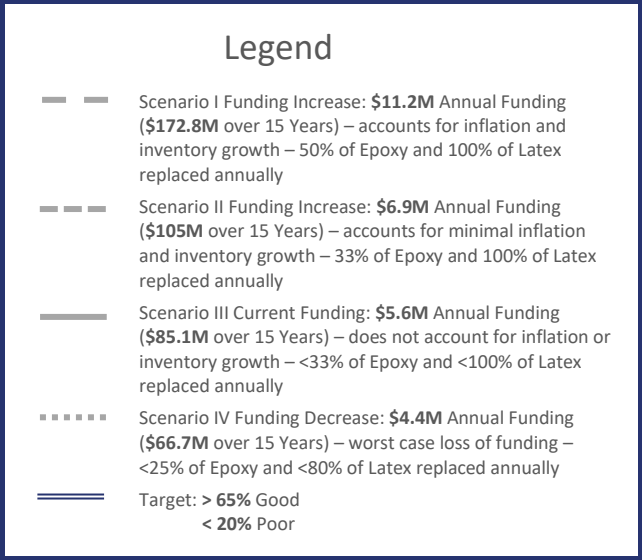
Annual Budget:
For long line pavement markings, the annual maintenance budget is approximately $5 million/year.

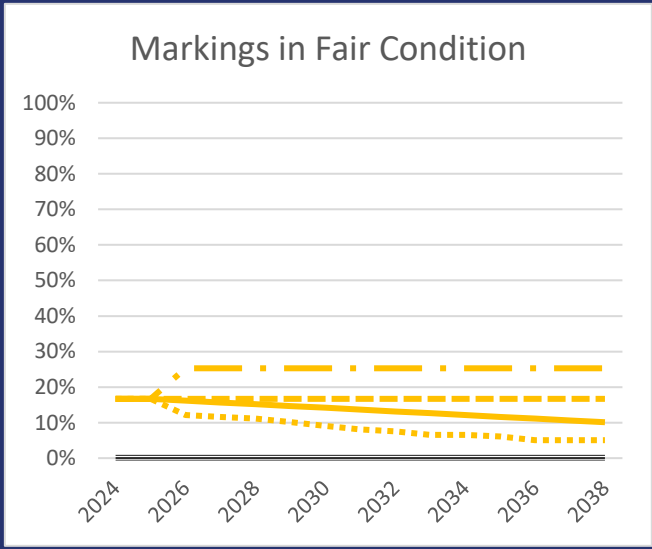
Asset Valuation:
Latex ranges from $1663 – $2494/mile depending on the type of road. Epoxy ranges from $2930 – $4395/mile. Total valuation ranges from **$7,821,324 – $11,731,147**.

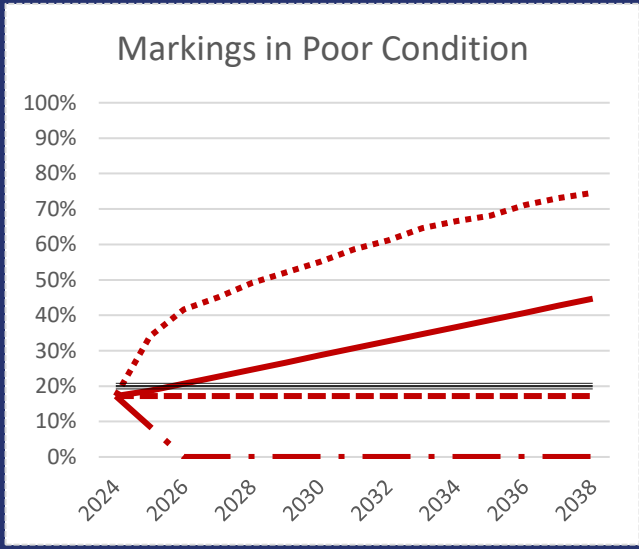
Coordination:
The Pavement Markings section coordinates with Pave & Rehab projects each year in order to avoid striping roads that are scheduled to be re-paved—this avoids wasteful spending.

PERFORMANCE PROJECTIONS









It is anticipated that pavement markings will become more important to maintain in the future as technology is developed for automatic ("driver-less") vehicles. These vehicles depend on electronic "eyes" to see the lane markings which help guide the vehicle down the highway. Specifications for lane marking width and reflectivity will be strenghtened in order to keep up with these technological developments. Therefore, we anticipate a future need for an increase in pavement markings budgets in order to meet new specifications.

POTENTIAL RISKS

Staff Turnover: Recruiting and retaining inspection personnel is a challenge that will eventually impact the ability to complete projects.

Financial Risks: Funding can be cut at any time, causing us to have to prioritize corridors rather than complete all maintenance.

Techonological Risks: Future connected vehicles will depend heavily on being able to read/decipher pavement markings. This could cause widespread changes in specifications and even SOGR metrics, and could increase the cost of future maintenance.