



Equipment and Supply Readiness

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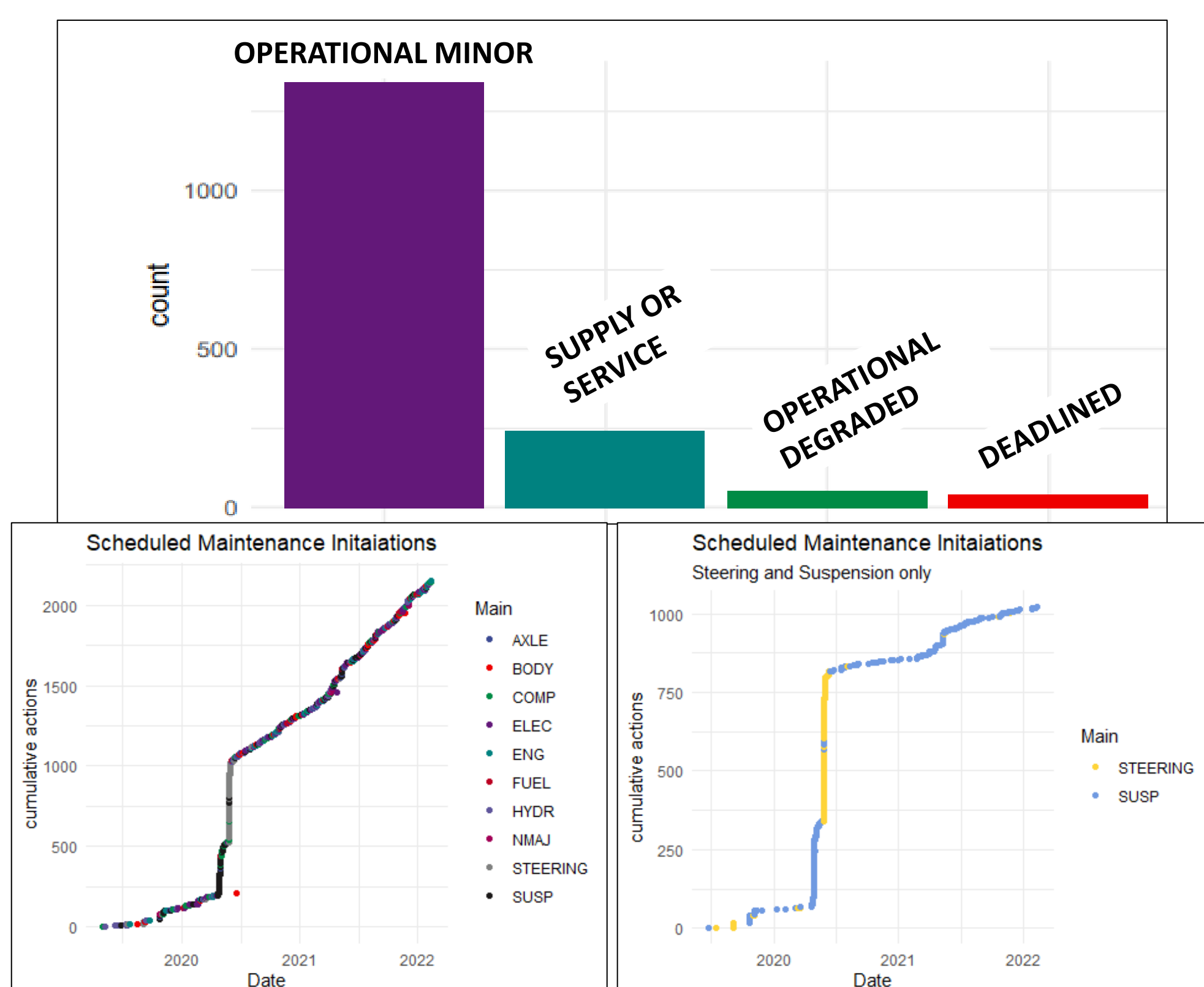
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SYSTEM READINESS

- JLTV is expected to be operationally ready to meet the warfighter's mission
- Maintenance issues in the JLTV have stunted its readiness
- Maintenance issues are recorded and managed in GCSS-MC
- In this project, GCSS-MC data was analyzed



Joint Light Tactical Vehicle (JLTV)

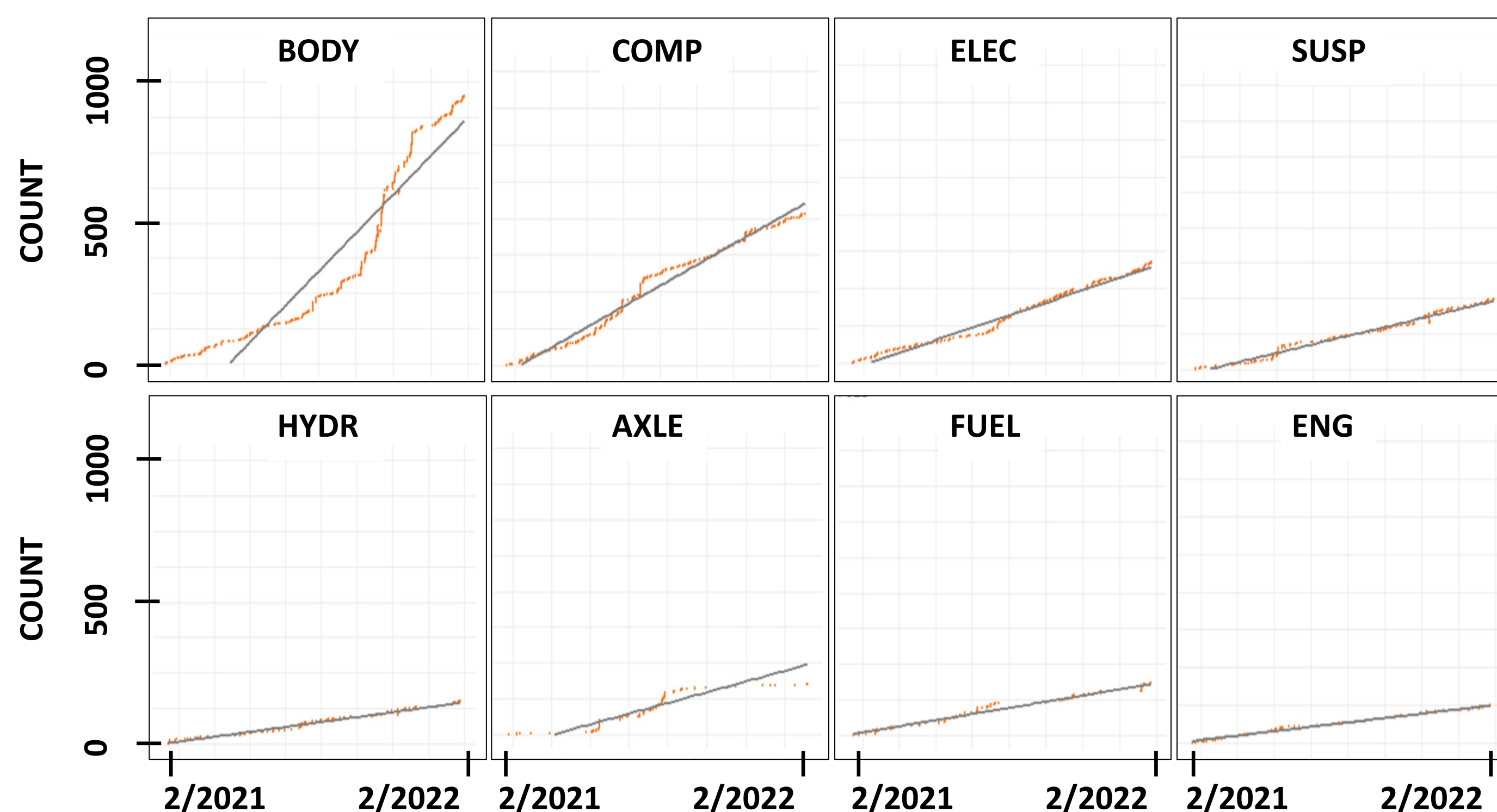


ANALYZING GCSS-MC MAINTENANCE DATA

- Data date range: Feb. 2019 and Feb. 2022
- First view of the data: Status of each JLTV unit as it entered the maintenance cycle
- Another look at the data from a different view: Cumulative maintenance actions by JLTV subsystem
- Using "views" of the data highlighted historical issues: significant rework had been done on the suspension and steering subsystems

PREDICTIVE MODELS

- Historical data from GCSS-MC was used to develop prediction models for each JLTV subsystem.
- Due to the simplicity of the linear model, fitting to the historical data varied across the subsystems.



Predictive models for the number of maintenance actions by JLTV subsystem

CONCLUSIONS AND FUTURE WORK

- An approach was developed to analyze historical maintenance data and also predict the occurrence of future maintenance events.
- Analyzing historical data is a **reactive** approach.
- Future work will use condition-based maintenance data from the JLTV to identify maint. events **prior to failure**.

JLTV CBM Sensor



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