**Program Goal**

- Develop an understanding of the influence of the microstructure of ultrafine grained materials, including the defect populations, on properties

**Approach**

- Conduct site-specific TEM analysis adjacent to and far from fracture surfaces
- Integrate with computational tools related to dislocation density and crack propagation

**Benefits**

- Understand the accumulation of damage during service for ultrafine grained Mg (and Ti)
- Provide a scientific framework by which damage is accumulated in highly strained structures

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**Project Duration**

Sept. 2013 to Aug. 2015