WHEREAS, the AASHTO Committee on Maintenance is seen as a leading technical resource for implementing safety and mobility best practices, and asset management principles to preserve and repair the nation’s bridges; and

WHEREAS, the strategic goals of the AASHTO Committee on Maintenance includes Safety and Asset Management; and

WHEREAS, one of the goals of the Technical Working Groups of the AASHTO Maintenance Committee is to promote a safe, reliable highway system in a state of good repair and to promote accountability and transparency through asset management inventory systems; and

WHEREAS, state DOTs use maintenance asset management data to allocate the funds provided for bridge maintenance, and the degree to which bridge element level data is collected and used is defined by FHWA policies and procedures; and

WHEREAS, ongoing investments in maintenance are key to preserving the bridge system network to keep the traveling public moving in a safe and reliable manner; and

WHEREAS, using unmanned aerial systems (UAS - unmanned aerial vehicles / UAVs, or “drones”), especially in the past 10 years has proven to be a reliable resource for collecting bridge information. However, research has not yet focused on the ability of UAS to support collection of element-level data according to the AASHTO Manual for Bridge Element Inspection (MBEI) criteria; and

WHEREAS, a research needs problem statement to develop this research will be focused on field testing the application of UAS bridge inspections as it relates to supporting bridge management data collection and practices at the element level; and

NOW, THEREFORE, BE IT RESOLVED. That the AASHTO Committee on Maintenance endorses the research needs statement for Evaluating and Implementing Unmanned Aerial Systems (UAS) into Bridge Management Methods through Element-level Data Collection. The AASHTO Committee on Bridges and Structures will submit this research project.