

Roadside Landscape Condition Assessment Tools and Technology

RESEARCH PROBLEM STATEMENT

- *Highway roadsides are increasingly being called upon to accommodate a wide range of competing functions, making design and ongoing maintenance more challenging. (Ref. recent FHWA Memo)*
- *Guidelines have been established for recommended best roadside design and maintenance practice to achieve a good state of repair. (Ref. AASHTO Guidelines, recently updated)*
- *A consistent measurement system is needed to compare various state and county roadside design and management approaches throughout the nation based on their overall functionality and sustainability – in terms of economic reality, environmental integrity, and social equity.*
- *Historically roadside condition was judged strictly by highway safety and visual quality/neatness, however...*
- *Research on roadsides as environmental assets of the highway system has show value in design and lifecycle management of select roadside areas/locations to achieve improved mitigation for highway environmental impacts on stormwater, air quality, pollinator and wildlife habitat.*
- *Social equity and context sensitive design and management are additional measurements that are currently being considered as factors in roadside design and management.*
- *We envision highway roadsides as high functioning landscapes which require lifecycle based integrated design and maintenance to perform. This tool would inform managers of roadside deficiencies so that management strategies can be adjusted to achieve a state of good repair.*

RESEARCH OBJECTIVE

- *This assessment tool would establish a roadside condition index to rate sites/corridors from best condition in terms of lifecycle data on maintenance actions and costs, highway safety, any and all environmental services, and social benefits/blending with surrounding landscape*
- *Measurement scale: **10** = Highway corridors that function as beneficial landscape systems which connect, integrate, and enhance the surrounding natural environment and land use infrastructure – to – **1** = Highway corridors that divide and degrade the surrounding natural environment and land use infrastructure*

RELATED RESEARCH

- *List connections with prior research (if any)* _____
- *List other committees with a stake in the issue* _____

SPECIFIC TASKS

- *Describe any products or process related tasks required* _____

