## Infrastructure Subcommittee Recommendations

William Berg Mary McBride Bob Dinneen Doug Hawkins Mark Maher  The following are in addition to the recommendations presented in 2008. 1 It is critical that there be good coordination of efforts in this area. Funding is very small for infrastructure across departments and significant problems remain to be addressed. Problems such as the fuel compatibility testing should be provided with much more funding perhaps 10x. Recommendation: there should be an interagency working group (combining USDA, DOE, DOT and EPA) to review R&D, coordinate and share information on infrastructure research efforts. The funding level for infrastructure R&D should be increased significantly. The interagency working group should develop specific goals and work plans in order to determine the appropriate funding level. This funding should (at a minimum) address – biofuel and engine compatibility testing, fuel distribution bottlenecks, pipeline compatibility, fuel approvals and certification.

2 Research in the distribution area should be focused on removing bottlenecks and making biofuels distribution more efficient. This needs to be done in close collaboration with DOT. We shouldn't be trying to replace the existing infrastructure, but to make better use of the existing infrastructure unless there is no other option. Recommendation: Focus of the infrastructure research should be on identifying and removing bottlenecks to liquid biofuels distribution and matching the distribution to matching availability of capable vehicles. Upon completion of the multimodal report the board should develop a plan (set priorities, assign responsibilities and resources with goals and timelines) to address these bottlenecks.

3 The uncertainty in the acceptable ethanol levels in various fuels appears to make flexible blending pumps a desirable feature of the distribution infrastructure. There are issues related to certification of blender pumps that need to be resolved. Recommendation: There should be an analysis carried out on the impact that different level blends have on the delivery infrastructure. Research should be conducted to identify barriers to the installation of flexible blending pumps. Funding should then be made available to remove any barriers to flexible blending at the pump.

4 Analysis activities – there are limited funds for sustainability work and many facets to consider (e.g., feedstock sustainability) we shouldn't ignore the separate aspects of sustainability that pertain to infrastructure. Recommendation: We need to have better data on the life cycle impact of different modes of transportation and distribution of all liquid fuels so that this data can be used in assessing the overall sustainability of biofuels.