March 8, 2013

California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

A Proposal for CARB Cap and Trade Investment from the Intelligent Transportation Society of California (ITS CA)

ITS California (ITS CA) is a public/private partnership formed to foster the development and deployment of Intelligent Transportation Systems (ITS) in California. ITS CA members include more than 80 public and private sector organizations with a mission to promote the use of advanced technologies in transportation within the State of California so that the residents can benefit from significant mobility, environmental and economic benefits resulting from the deployment and commercialization of advanced transportation systems.

The Draft Concept Paper distributed by your agency indicated 35% of greenhouse gas (GHG) emissions are attributable to Transportation. Your projections indicate this number to remain unchanged from 1990 to 2020. We strongly believe that an investment in advanced transportation technologies, and the operations and maintenance of those technologies, would enable meaningful and sustained reductions in GHG emissions attributable to Transportation.

Indeed, the environmental benefits, including reductions in GHG emissions, are such that we are proposing that the **CARB Cap and Trade Investment Plan** include a provision for the funding of three key elements: 1) On-going operations and maintenance of ITS systems, 2) Capital funding for underfunded and performance based ITS programs, and 3) Research and Development of advanced transportation technologies.

This proposal is consistent with AB 32, SB 375, and the provisions of AB 1532 and SB 535 - and effectively meets the transportation and GHG emission reduction goals of state and local communities. Independent studies have shown that ITS, which includes traffic signal synchronization, freeway management such as ramp metering, toll collection and enforcement, and systems to aid transit and emergency services, have demonstrated the ability to achieve reductions in GHG of up to 20%. In addition, new developments in automation and “crashless” vehicles will improve safety and reduce incidents that currently accounts for more than 30% of the traffic congestion and resulting air pollution. ITS projects represent smaller financial investments and can provide incremental reduction in GHG while planning and funding is being sought for larger construction projects. ITS projects have very high cost to benefit ratios which can be realized in a very short time.

California is a leader in technology development and job creation in the ITS sector. We have an opportunity to realize substantial GHG reduction benefits while at the same time improving safety and creating jobs in our Golden State. We understand that the current investments have to go to existing programs that can result in immediate improvements without lengthy development so we are proposing the following:

1. Invest in maintaining and operating current systems that are in poor state of repair and are not yielding the GHG reduction potential they are capable of because of a lack of maintenance and operations resources.

   Traditionally, Federal, State and local funding has been provided for the deployment of advanced transportation improvements. Unfortunately, cities and regional agencies have experienced declining resources and their ability to properly operate and maintain even mission critical ITS such as traffic signals has been compromised. As a result, *all vehicles and travelers on our transportation system* are being forced to experience unnecessary delays due to aging equipment and a lack of staff resources. This causes higher fuel use and GHG emissions in many cases in excess of 20%. California faces a significant shortage in funds to maintain our existing transportation system much less provide enhancements to meet the challenges of increasing development in existing urban and suburban areas while meeting the requirements of SB 375.

2. Invest in completing currently under-funded and performance measurement-based ITS programs.

   There are many California Cities that applied for American Recovery and Reinvestment Act funding to improve transportation efficiency and reduce GHG. Many of those projects, while having a lot of merit, still remain "on the shelf". Proposition 1B, approved by California voters in 2006, provided funding for transportation improvements and more specifically corridor mobility improvements. This successful program funded traffic signal synchronization and freeway ramp metering to improve corridor mobility, reduce congestion and improve air quality. Due to limited funding, many projects that have a lot of merit still remain unfunded.

   Transit corridors are an integral part of transportation technology to increase transit ridership. Bus Rapid Transit, Bus Signal Priority and better traveler information will result in higher ridership. Shifting trip to transit makes the corridors and roadways operate more efficiently and result in congestion reduction, fuel savings and substantially lower GHG.

   Recently, many funding programs, including the recent Federal Moving Ahead for Progress in the 21st Century Act (MAP-21) surface transportation program have included performance measurement requirements. Performance measurement systems help systems operate more efficiently and are capable of measuring the before and after performance to make sure that promised benefits from investments are achieved and preserved. This Cap and Trade program should consider these components for funding.

Intelligent Transportation Society of California

3. Invest in Research and Development of transportation technologies and pilot programs to promote emerging technologies for GHG reduction. The Cap and Trade program should support California universities and government agencies in collaborating with the private sector in the development and deployment of new technologies and systems that promote substantial congestion and GHG reductions. There are existing programs that have been receiving substantial support from the private sector as well as from federal and state agencies. Such programs include Connected Vehicles, Crashless Cars and a number of other ITS technologies. This has the greatest potential to keep California as a leader in high technology and will create many jobs for our state.

With Cap and Trade revenue to support not only deploying ITS but also operating and maintaining the installed base, California's transportation system would be able to operate as efficiently and effectively as possible. Recurrent significant GHG reductions will be realized, the mobility of people and goods will be improved, and the resulting economic benefits will include job growth - in large part because many of the ITS technologies and systems are developed and manufactured here in California.

On behalf of ITS California, I thank you in advance for your consideration of this proposal to include funding of ITS in the AB 32 Investment Plan.

Sincerely,
ITS California

Jane White P.E.
Chair, Board of Directors