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Grade Crossing Protection Fund APPLICATION FOR FUNDING

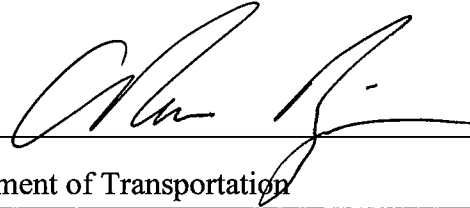
The Commission's objectives in distributing monies from its Grade Crossing Protective Fund (GCPF) are as follows: To reduce accident/incident frequency and severity at both public and private railroad crossings; and to reduce pedestrian trespassing and the frequency of trespass-related deaths and injuries along railroad rights-of-way. Any public, private, or nonprofit entity may submit an application to the Commission for GCPF monies.

The focus of the GCPF program is to fund projects that demonstrate a need for improved public safety related to one of the following four categories:

- **Grade crossing safety projects** (the Commission's original GCPF program).
- **Trespass prevention projects.** Examples of projects in this category include fencing or other physical barriers that prevent trespassing on railroad rights-of-way; pedestrian warning devices; establishing new public grade crossings; installing channeling devices; media/public relations campaigns; and enforcement-related activities.
- **Private crossing safety improvements.** Examples of projects in this category include private crossing closures; installation of private crossing-specific warning devices; installation of nighttime/off-hours locked gates; and improvements to reflectorization/conspicuousness of existing warning devices.
- **Miscellaneous safety projects.** Examples of projects in this category include improvements to motorists' ability to see approaching trains, including the removal of physical obstructions; participation in roadway improvements at or approaching grade crossings; and mitigation of crossing closures.

All projects that fall within any of these four general categories are eligible for funding consideration.

Applicant Name: Ahmer Nizam



Organization: Washington State Department of Transportation

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Type of Application: Application seeking funding for state-wide grade crossing safety training

Private crossing safety improvement

Trespass prevention

Miscellaneous

Please list all of the other companies (e.g., railroad companies) organizations, or state or local agencies that may be involved in implementing this proposal and the name, address and phone number of each.

The training will be coordinated by WSDOT, however, further support is expected from the Federal Highway Administration and BNSF Railway Co.

Note: Requests for public grade crossing safety projects will be continue to be processed through the Commission's regular petition process.

Project Information – Please attach additional information if needed.

- 1) *Provide a detailed summary of the hazard being addressed, including any accident/incident*

Signalized roadway intersections located in the vicinity of highway-rail grade crossings often cause vehicle queues to extend over the tracks, thereby creating the potential for motorists to become trapped on the tracks when a train is approaching the crossing. This scenario is addressed via railroad preemption of the highway traffic signals, whereby the highway traffic signals are interconnected with active railroad warning devices, causing them to enter into a special phase to clear vehicle queues from the tracks. Successful interconnection of these signals requires advanced knowledge of railroad preemption issues and design considerations, coordination between both highway and railway signal experts, and maintaining communication between rail and road authorities throughout the life of the interconnection.

Due to the growing number of intersections that require this analysis, training in latest technologies and methodologies for transportation personnel is very important.

- 2) *Provide a detailed description of your proposed project and explain how its implementation will eliminate or mitigate the hazard. If available, please attach any drawings or construction plans for your proposed project (see section 1 if filing electronically):*

The Washington State Department of Transportation (WSDOT) has identified a need for statewide training on railroad preemption of traffic control signals. The primary target audience for the training will be State and local transportation personnel, and railroad public projects and signal personnel. Due to the need to strengthen communication between these two groups (i.e. road authorities and railroad) in this area, it would be beneficial to include both in such a training effort. The focus of the training would include understanding railroad signals and track circuitry, operational and design considerations on when to interconnect, methodology in determining extent of preemption, the use of pre-signals, and movement towards statewide uniformity in railroad preemption engineering.

The proposed presenter is Mr. Richard Campbell, President of Railroad Controls Limited (Benbrook, Texas). Mr. Campbell has provide this training to staff from the Federal Railroad Administration, Federal Highway Administration, state DOTs, local agencies, and railroads.

- 3) *Provide cost estimates, including those related to long-term maintenance:*

Please see attached cost estimation document. Assuming 30 students, the estimated cost is \$4,000.

- 4) *Estimated timeline of project, if approved: 2 day training in March 2007*

5) *If known, provide a description of how the project's success would be measured:*

- Increase awareness and knowledge of the dangers of this situation and how to successfully address the hazard;
- Increased cooperation and coordination between railroads and local agencies in this area;
- Adoption of a uniform state-wide methodology for determining required preemption times;

6) *Other comments:*

Please contact me with questions.

Interconnection and Preemption of Highway Traffic Signals
Seminar Coordination Information
August 10, 2006

This document is intended to provide information relating to hosting and sponsoring a preemption seminar.

The preemption seminar is an in-depth look into the operational requirements necessary to successfully interconnect and preempt a highway traffic signal with adjacent highway-rail grade crossing warning devices. It includes history, background and review of basic traffic signal sequencing and timing as well as railroad train detection circuits and timing parameters. The seminar then goes into industry definitions and standardized terminology relating to interconnection and preemption followed by MUTCD requirements. The seminar progresses through development of preemption requirements at a "typical" intersection and how to determine the proper timing values. The Texas DOT Preemption Form is utilized for the "typical" intersection. Finally, various "how" and "how not to" videos are shown and special situations such as turning moves and pre-signals are discussed. The last four hours deal with new technology and the use of the serial data interconnection system. This section includes video of live train moves and review of preemption operation based on data recovered from the serial preemption system. At this time, the seminar requires a minimum of 16 hours to complete. In some cases, a seminar may be extended to work on actual case studies within a given agency or incorporate a "field trip" to perform a field inspection on a live intersection(s). These additional requirements are discussed and planned prior to scheduling the seminar in order to secure adequate time to complete the training. When a basic 16 hour seminar is planned, it is generally best to start at 8:00 AM on the first day and go until 5:00 PM followed by a full day on the second day. Consideration should be given to holding the seminar either where lunch can be brought in or obtained nearby reducing the need for more than a 1 hour lunch break due to the volume of material that must be covered.

A good class mix of participants generally enhances the seminar. Traffic engineers involved in signal design, traffic signal technicians and maintenance personnel, railroad signal maintainers and supervisors and managers will all benefit from the seminar. Based on the policies of the sponsoring agency, it may also be desirable to include local traffic signal design consultants. In cases where consulting firms attend, seminar sponsorship (meals and/or breaks) should be solicited from any "for profit" attendees. Also, due to the highly technical and sensitive nature of the material being presented, close scrutiny should be given to unknown attendees, especially those who could benefit from knowledge obtained in the seminar for unethical practices or litigation against the attendees.

Planning for a successful seminar usually starts a number of months in advance of the actual seminar date. Seminar dates are established by calling Denise Hecht at (817) 820-6327 or via e-mail at dhecht@railroadcontrols.com. Once a location and dates are established, invitations need to be sent out in order to permit adequate time to be scheduled for attendees and travel arrangements to be completed.

A seminar is typically hosted by a state department of transportation or other similar agency, a local government, or a railroad. As a general rule, the Federal Highway Administration (FHWA) provides some or all of the funding to sponsor the seminar. It is my understanding that the local FHWA office coordinates the seminar and funding; however, funding options may be explored by contacting Mr. Frank Julian at the FHWA Resource Center in Atlanta at (404) 562-3689.

In many cases, various Class 1 railroads which operate in the state where the seminar is being conducted such as Union Pacific, BNSF and CSX may participate by providing refreshments for breaks, lunches, etc. Railroad contacts which may be able to assist in providing support are as follows:

Mr. Steve Berki	Union Pacific Railroad	402-544-4357
Mr. Lyn Hartley	BNSF	913-551-4540
Mr. Eric Peterson	CSX	904-359-1245

In addition, local consulting firms sending personnel should be contacted for similar support.

The costs associated with presenting a seminar vary based on the space an agency has available, plans for lunch and refreshments and any special requirements. Time to present the seminar is provided at no cost to the agency. Travel costs are reimbursed on an actual or "lump sum" basis at the choice of the hosting agency. Typical costs for budgeting of basic needs are as follows:

Travel costs	\$600
Car rental or ground transportation	\$175
Lodging	\$125/night
Meals	\$45/day
Class Workbook (reproduction)	\$30/student *
AREMA Recommended Practice & Certificate (recommended)	\$100/student
ITE Recommended Practice (if desired)	\$25/student
Class Room	TBD
Meals	TBD
Refreshments (breaks, morning)	TBD
Training Room	TBD
Wireless Microphone (> 40 students)	TBD
Screen (9' diagonal minimum)	TBD
Projector / Digital Video Tape Player	Furnished by RCL

* Class workbooks may be printed by the host agency. They are approximately 80 pages, copied front and back.

For groups of 40 or less, there is generally no need for a wireless microphone or PA system. For groups larger than 40, a PA system is necessary to provide adequate sound for all participants. The sound system should include the ability to connect a standard headphone jack on a laptop PC in order to broadcast the laptop audio over the sound system. If the group is small enough to negate the need for a PA system, a pair of amplified computer or similar speakers can be used to provide audio for the video presentations. Video equipment is provided by RCL and includes all of the cables and equipment necessary for the video presentations.

If you have any questions, please contact Kurt Anderson, Denise Hecht or Rick Campbell at 817-820-6300.