# Highways for LIFE (HfL) Questions and Answers – updated 6/21/07

This paper includes a list of frequently asked questions and answers that may better assist you in understanding the Projects element of the Highways for LIFE program.

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## **PROGRAM QUESTIONS**

1. What are the selection criteria?

Answer: Several criteria will be used to evaluate the submitted applications for selection of the HfL projects. Priority will be given to projects that addresses the following selection criteria –

- Achieves the HfL performance goals for safety, construction congestion, quality, and user satisfaction.
- Delivers and deploys innovative technologies, manufacturing processes, financing, contracting practices, or performance measures that will demonstrate substantial improvements in safety, quality, and cost effectiveness.
- Includes innovations that the State feels will lead to change in the administration of the DOT's transportation program.
- Uses performance-based contracting to achieve the HfL performance goals. This is not a "required" criteria but additional consideration will be given to projects that propose to use performance contracting to achieve the HfL performance goals.
- Is ready or will be ready for construction within one year of being selected as a HfL project. For the purposes of the HfL program, the FHWA considers a project to be "ready for construction" when the FHWA Division Office authorizes the construction project.
- The DOT demonstrates a willingness to participate in subsequent technology transfer and information dissemination activities associated with the project(s).
- The project selection committee will be selecting a wide variety of project types (including size and range of innovations) to be funded by the HfL program.

- HfL has a goal that each State receives funding for at least one project, considering that
  they must meet the basic eligibility criteria. Therefore, the effort will seek a national
  distribution of funding.
- The DOT is willing to accept FHWA Division Office oversight if the project is approved by HfL.

## 2. What do you mean by "innovation"?

Answer: These would include things such as new materials, designs, equipment, manufacturing processes, financing, or contracting methods that meet all of the HfL program goals of 1) improving safety, 2) reducing congestion due to construction, and 3) improving quality.

An "innovation", as defined here, must be one that the State has never before or rarely used. Innovations used on emergency or unique projects are exceptions. The proposed innovations must be available and ready for use. They should not require further development or test and evaluation. The innovations must have (as appropriate) standards, specifications, test procedures, training and operations guidance to support the application of the innovation in routine highway design and construction. Further, the innovations have been used successfully in the U.S. or internationally and documentation or sufficient evidence of the benefits must also be available. The FHWA division office will determine if the proposed technology is an innovation to that particular State.

## 3. What are some ideas of HfL innovations that we are looking for?

Answer: Below are examples of how one innovation can meet all of the HfL criteria. The following are synopses of how the innovation meets the HfL performance goals. It is just a sample and not meant to be all inclusive. It is expected that the States will provide more detailed explanations on their submittals.

**Prefabricated Bridge Elements and Systems (PBES) -** The use of PBES could meet most if not all the HfL performance goals because the technology can ...

- ... Improve Safety
- The potential for a work zone crash would be minimized.
- The potential for worker injury would be minimized.
- The facility would be safer after construction because the new bridge or construction project would comply with or exceed all current design standards.
- ... Reduce Congestion Caused by Construction
- The project would be constructed with significantly reduced impact to the motorists because the bridge elements would be cast or erected off-site. If this were only a bridge replacement project, the trip time during construction would be impacted only during the actual placement/setting of the prefabricated bridge which is significantly reduced as compare to conventional on site construction..

- ... Improve Quality
- The bridge is fabricated and assembled in a controlled environment therefore the quality of the bridge would be improved as compared to building it on-site. This could result in a smoother, quieter, and longer lasting product.
- ... Improve User Satisfaction
- By reducing the time that the community and highway users are impacted during construction they would be a much more satisfied customer.

**Geosynthetic fabrics** – The use of geosynthetic engineering fabrics consisting of polymeric filaments to reinforce and separate the natural earth material from the aggregate base supporting the pavement could meet most if not all the HfL performance goals because the technology can...

### ... Improve Safety

• Overall construction time is minimized; therefore, the time that highway users and construction workers are exposed to potential incidents is reduced.

#### ... Reduces Congestion Caused by Construction

- The technique reduces overall construction time therefore reducing congestion caused by construction. The time between removing an existing pavement and placing a new pavement would be minimized. The process reduces construction time for subgrade preparation leading to quicker pavement installation.
- Using geosynthetic fabrics in combination with readily compacted aggregates to replace poor soils eliminates drying and reworking saturated soils and timeconsuming compaction required when underlying soils are less than ideal for supporting pavement.

#### ... Improve Quality

• The fabric increases the life of the pavement support system.

#### ... Improve User Satisfaction

The use of geosynthetic fabrics is a time saver that improves base life and stability, adds quality, longer life and smoother ride to the pavement. This technique reduces the overall time the highway users are impacted and may require less maintenance in its life cycle.

Below is an example of how more than one innovation can meet all of the HfL criteria. The following is a synopsis of how the innovations meet the HfL performance goals. It is just a sample and not all inclusive. It is expected that the States will provide more detailed explanations in their submittals.

**Combination of innovations** - A combination of A+B+C bidding (time, cost, and warranty with performance criteria), quick-change movable barriers, and traffic monitoring and control using ITS technologies could meet most if not all the HfL performance goals because:

#### Improve Safety

- The use of quick-change movable barriers eliminates the need for construction workers to physically move the barriers in traffic and reduces significantly the time required to take multiple lanes out of service to move the barriers.
- Use of ITS technology improves traffic operation, improves communication with motorists and allows more uniform passage through the work zone.

#### Reduce Congestion Caused by Construction

- The use of quick-change movable barriers may not require closing multiple lanes down to change the maintenance of traffic therefore reduces time highway users are impacted.
- The use of ITS to monitor and control traffic improves the efficiency of traffic management.

#### Improve Quality

• With the use of A+B+C bidding the contractor would be provided with incentives to finish the project in a shorter amount of time. The contractor would be more resourceful and find ways to complete the job faster. For example, the contractor could mill the old pavement surface and in a close coupled paving operation pave continuously versus, milling and leaving the rough pavement for days or weeks or paving in segments. Uninterrupted, continuous paving makes the pavement smoother. The requirement of a warranty with performance criteria would also produce higher quality pavements.

## Improve User Satisfaction

- The use of A+B+C bidding encourages the contractors to be innovative in how they can complete the project in less time therefore reducing impacts to the highway users.
- The use of quick-change movable barriers and ITS, the contractor can adjust the maintenance of traffic fairly easily to accommodate the traffic demand.

#### 4. Who will collect, evaluate and monitor the projects?

Answer: FHWA has the lead for monitoring and evaluation of HfL projects and would be responsible for data collection, to the extent that it is not already being collected by the State. For example, many States do not collect the measurements for smoothness and noise for all projects, in such instances FHWA (HfL) will collect, store, and analyze this data.

Data that is already being collected on a routine basis by the State will still be collected by the State. (i.e., crash rate on the project, worker injury data, fatality data, etc) Data that is necessary to show that the project is meeting the HfL performance goals will be collected either by the construction contractor or State. (i.e., duration highway users are impacted, trip time during construction, queue length during construction, pavement smoothness, close proximity noise measurement, user satisfaction, etc.) These expenses will be eligible for federal funds as part of the construction project. Data required, after the completion of the construction project, would be handled by HfL with the assistance of the division and State. (i.e., pros and cons of the innovations implemented on the project, lessons learned, etc.)

#### **FUNDING QUESTIONS**

1. Are activities during pre-construction eligible for HfL funds?

Answer: No, activities during pre-construction are not eligible for HfL funds. HfL project funds are only for the construction phase of a project.

2. Would a project that has already been authorized by a Division Office be eligible for HfL funding?

\*\*Answer: Projects that are under construction that already include innovations that meet the HfL goals are not eligible. HfL does not want the State to use the program as just a funding source. However, projects that are currently under construction that want to add innovations to meet the HfL performance goal through change orders could be eligible as a HfL candidate project.

The regulation does not allow the State to <u>replace</u> one Federal fund category with another [changing funding codes] however; it does not say that another funding source cannot be <u>added</u>. See below.

TITLE 23--HIGHWAYS CHAPTER I--FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION PART 630\_PRECONSTRUCTION PROCEDURES--Table of Contents Subpart A\_Project Authorization and Agreements Sec. 630.110 Modification of original agreement. (a) When changes are needed to the original project agreement, a modification of agreement shall be prepared. Agreements should not be modified to replace one Federal fund category with another unless specifically authorized by statute....

3. Can the Division Office authorize the project prior to being selected as a HfL Project?

\*\*Answer: Authorizing a HfL candidate project during the solicitation period does not disqualify its eligibility. The project must use the Advance Construction process to be eligible to change funding codes if the project is selected as a HfL Project. The Division Office should call Mary Huie (Highways for LIFE Project Coordinator, HQ) to discuss the issue.

4. If there are less than 15 HfL project applicants per year, does that mean that those projects would receive more than \$1M in funding?

\*\*Answer: The current approach is that the maximum funding will be \$1,000,000 regardless of the number of applicants per year.

5. What is the likelihood that a State would receive HfL funding (monies) for more than one project?

Answer: Our goal is for each State to receive money for one HfL project, and we are allowed to fund a maximum of 15 projects per year. We expect the Divisions to work very closely with

their States to develop successful HfL projects. If there are some States that are not interested in applying for the funds, or whose project does not meet the HfL criteria, then it may be possible in the future for a few States to receive money for more than one HfL project. If that scenario should develop, an announcement indicating that there are additional monies to be distributed would be sent out.

6. Are there other projects that can be designated as an HfL project that does not require receiving HfL monies?

Answer: Yes. There are three options for submitting a proposal for an HfL project (see examples below). Option 1 provides \$500,000 - \$1,000,000 in HfL funding. Option 2 allows the States to increase their pro rata of other federally apportioned funds such as NHS, STP, IM and CMAQ as their State match. Option 3, provides both funding and a waive match. Our goal is to provide one project for each State under Option 1 or Option 3. In addition, States can submit a second proposal for just a waive match. However, the number of States that receive both a HfL-funded project and a project for just a waive match may be limited because of the additional HfL resources required to provide technical services, showcase technologies, deliver training and transfer technology as well as document and market the benefits of the project.

7. Can more than one project be submitted for HfL funding (monies) in any one year?

Answer: We do not prohibit a State from submitting more than one project for money for a particular fiscal year. However, we would encourage discretion. We expect that the Division Office will work closely with their State to develop and submit the best project that meets the HfL criteria. A State will not receive monies for more than one project in any particular fiscal year. However, as indicated in the response above, it may be possible in a few instances that a State would receive one funded project under Option 1 or Option 3, and a second HfL project under the waive match only option.

8. How is the HfL Obligation Limitation (OL) addressed?

Answer: HfL funds are not counted against the State's obligation authority. HfL funds under Funding Option 1 (HfL funds) are additional funds given to the State. For example, if a selected candidate project is granted \$1,000,000, they will receive the entire \$1,000,000. When receiving the \$1,000,000 grant, the state will also receive an additional \$1,000,000 in obligation authority. However, Funding Option 2 (waive match) will follow the normal obligation authority regulations.

## 9. Do the HfL funds expire?

*Answer:* The HfL funds can be carried three years beyond the year it is allotted to the HfL program office. However, we expect the FHWA division offices to obligate the HfL funds within one year of being allocated to the selected HfL projects. Once the HfL funds are obligated, they do not expire.

## APPLICATION QUESTIONS

1. Does the project need to meet all 4 performance goals?

Answer: Yes, the Highways for LIFE program is committed to making a significance difference in America's driving experience. However, there may be instances where all four performance goals are not applicable. For example, if a project is located in a rural area where there is no congestion, the performance goal for reducing congestion due to construction may not be applicable. However, the Highways for LIFE project will need to recognize and address the importance of safe and effective work zones and should be exemplary in the manner that this important customer service is delivered. In such instances, the application must indicate why a particular performance goal is not applicable.

2. Assuming a project(s) is not selected in the first round, will there be a required resubmission, or will projects initially not selected be automatically reconsidered?

\*\*Answer: The projects that are not selected will not be automatically reconsidered. In most cases, these applications will need to be revised to address the weaknesses.

#### We are no longer using GRANTS.GOV as a clearinghouse.

All applications from the State must be submitted to the division offices. The division office is to forward the State's application and provide a recommendation memorandum to the HfL office with the following information:

- Identify the features in the application that are truly innovative in their State (not a standard practice);
- Determine if the project meets the minimum requirements of HfL;
- Identify the measurable HfL goals that will be met by the innovations;
- Determine if the innovations will make a significant improvement in the State's construction program;
- Provide a recommendation if this project should be selected as a HfL project; and
- Determine if the State is willing to consider making a standard practice of the innovation after a successful demonstration.

## Highways for LIFE Funding Examples

State XYZ receives the following federal apportionments for FY 06:

	<u>10% Limit</u>
Interstate Maintenance: \$8,000,000	\$ 800,000
National Highway System: \$45,000,000	\$ 4,500,000
Surface Transportation Program: \$30,000,000	\$ 3,000,000
Congestion Mitigation/Air Quality: \$8,000,000	\$ 800,000

The proposed HfL project has a construction cost of \$8,000,000. It is an 80/20 project.

## **Option 1- Highways for LIFE funds**

Federal 80% : \$6,400,000

State 20% : \$1,600,000  $\leftarrow$  Of the \$1,600,000, the State could choose Option 1 to

receive HfL funds in the range of \$500,000 to \$1,000,000.

HfL funds : \$1,000,000 State funds : \$ 600,000

If HfL provides \$1,000,000 in HfL funds then the State must fund the remaining \$600,000. The HfL funds do not impact the State's obligation authority. The State is also responsible for any overruns exceeding the initial project cost.

### **Option 2 – Waive State Match**

Federal 80% : \$6,400,000

State 20%: \$1,600,000  $\leftarrow$  Of the \$1,600,000, the State could choose Option 2 to

use other federally apportioned funds for the State match.

NHS funds : \$ 800,000 CMAQ funds : \$ 800,000

OR

STP funds : \$ 1,600,000

The State could choose to use the maximum 10% of their CMAQ funds and \$800,000 of NHS funds as their State match OR use all STP funds to make the match. The funding category (NHS and CMAQ, or STP) the State chooses to use for their State match must meet that program

funding eligibility requirements. The State is also responsible for overruns exceeding the initial project cost.

## Option 3 – Highways for LIFE funds and Waive State Match

Federal 80% : \$6,400,000

State 20%: \$1,600,000  $\leftarrow$  Of the \$1,600,000, the State could choose Option 3 to

receive HfL funds and use other federally apportioned

funds for the State match.

HfL funds : \$1,000,000 STP funds : \$ 600,000

This option allows the State to receive the \$1,000,000 of HfL funds and use other federally apportioned funds for the remaining amount of the 20% State match. The funding category (i.e. STP) the State chooses to use for their State match must meet that program funding eligibility requirements. The State is also responsible for any overruns exceeding the initial project cost.