

FHWA PAVEMENT PRESERVATION PROGRAM CUSTOMER SATISFACTION BENCHMARK SURVEY

Introduction

As a pavement preservation practitioner, you are being asked to complete this customer satisfaction survey to help the Federal Highway Administration (FHWA) better understand current pavement preservation practices, gauge satisfaction with FHWA's pavement preservation support, and identify interest areas as its Pavement Preservation program is updated. Past FHWA Pavement Preservation programs focused primarily on technology transfer needs that emerged over many years but may not have included recent changes in practice. Your responses will help define the current state of practice and serve as an important first step in identifying areas that would benefit from additional research, guidance, or technology transfer activities.

This survey is being distributed to the Pavement Preservation Engineer at each of the State Departments of Transportation (DOT) as well as local agency practitioners representing cities, counties, and regional agencies. It is estimated that the survey takes approximately 20 minutes to complete.

Instructions

Please complete the survey within 2 weeks of receipt. If you have any problems with the survey please contact David Peshkin at dpeshkin@appliedpavement.com. Thank you for your assistance!

For the purpose of completing this survey please use the definition of pavement preservation provided in MAP-21: **“programs and activities employing a network level, long-term strategy that enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety, and meet road user expectations.”**

Questionnaire Tips

1. To view and print an entire blank questionnaire, [click here](#). Use the keyboard shortcut “CTRL+P” to print.
2. If you are completing the questionnaire over several days, or if you want to send a partially-completed questionnaire to a colleague, click on the “save and continue” button at any time for an edit link to be sent to your email. You can then use that link either to return to where you left off or to forward to your colleague.
3. To ensure that your responses are saved prior to submission, advance to the next page before exiting the survey.
4. To navigate through this questionnaire, use the “Back” or “Next” buttons at the bottom of each page.
5. To review and print your answers prior to submittal, advance to the last page of the survey. Print using “control p.”
6. To submit the survey, click the “Submit” button on the last page.

Customer Satisfaction Survey Questions

When completing the survey, please select the best response from the options provided for each question. Optional comment boxes are provided through the survey so you can provide additional feedback on your responses.

Section 1: Program Background

In order for FHWA to continue to provide a high level of pavement preservation support, these questions ask for foundational information about the agency's pavement preservation program.

1. Which of the following statements best characterizes your agency's pavement preservation program? [Select the best answer]
 - a. Pavement preservation is a formal, documented department policy (please provide a link to the policy in the comments box).
 - b. Pavement preservation is a formal policy, but it is not well documented.
 - c. It is not a policy, but dedicated funding is budgeted for pavement preservation.
 - d. Informal practices are followed by some districts/regions, but there is no formal policy.
 - e. We have a program, but none of these definitions fit (please explain in the comments box).
 - f. We do not have a pavement preservation program.

Comments: _____

If options a through e are selected from Q1, this follow-up question appears:

2. How long has your agency had a pavement preservation program? [Select the best answer]
 - a. Up to 3 years.
 - b. 3 to 10 years.
 - c. 10 or more years.
3. Who is responsible for pavement preservation treatment/project selection? [Select the answer closest to your practice and expand on your response if asked]
 - a. Preservation decisions are made by the Central Office
 - If yes, identify responsible department, such as Maintenance, Pavements, Pavement Management. Comment: _____
 - b. Preservation decisions are made at the local level (e.g., District or Region).
 - c. Preservation decisions are made collaboratively with both Central Office and local input.
 - d. Other. Comment: _____
4. How are your preservation activities funded? [Select all that apply]
 - a. The agency earmarks funds specifically for pavement preservation.
 - b. The agency and/or districts/regions are free to fund preservation from existing budget line items as they see fit.
 - c. Preservation budgets are determined based on identified needs.
 - d. No special funds are set aside for preservation.

e. Other [please explain in the comments box]

Comments: _____

5. How are your preservation projects constructed? [Select the best answer]

- a. Preservation treatments are only constructed by in-house forces.
- b. Preservation treatments are constructed both by contractors and in-house forces.
- c. Preservation treatments are only constructed by contractors.
- d. Other [please explain in the comments box]

Comments: _____

6. How would you define the maturity of your preservation program? [Select the best answer]

- a. We consider our preservation program and practices to be in their infancy or relatively immature.
- b. Our preservation program and practices are improving, but do not yet represent the highest standards.
- c. Our preservation program and practices are somewhat mature but there is still room for improvement.
- d. Our preservation program and practices are fully mature to the point that others could learn from and follow them.

Comments: _____

7. The following table identifies possible pavement preservation program benefits. In column A, identify the benefits of pavement preservation you have documented for your preservation program (and not for individual treatments). In column B, identify those that you are not documenting now, but consider in the future. The last column (Column C) can be used to identify benefits for which you need additional guidance. Comment boxes are provided if you want to explain your response or identify guidance that would be beneficial to enhance your use of the specific methodology.

	Column A	Column B	Column C
Documented Pavement Preservation Program Benefits	Currently Using	Considering in the Future	Would Benefit from Additional Guidance on this Topic
a. Reduced the overall cost to manage our roadway network.	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

Comments:			
b. Improved the performance (or condition) of the pavement network. Comments:	○	○	□
c. Increased the number of miles we were able to treat. Comments:	○	○	□
d. Achieved system performance targets. [Please identify the targets in the comment box] Comments:	○	○	□
e. Reduced crashes or fatalities. Comments:	○	○	□
f. None of these techniques (we are not monitoring benefits of our program)	○	○	□
g. Other [Please explain in the comment box] Comments:	○	○	□

Section 2: Program Guidance and Tools

Questions in this section assess the degree to which FHWA guidance and tools are satisfactory for supporting your pavement preservation program.

- 8. This question explores the degree to which current guidance and tools are available to support your preservation program. If you are not sure of your response, you can indicate that using the last column, *Do Not Know*. You are encouraged to explain your responses using the Comment box provided for each item in the table, especially if you picked “Somewhat Agree” or “Disagree” as your response so we can learn more about the challenges you face.

	Agree	Somewhat Agree	Disagree	Do Not Know
a. Our agency has published guidelines available on project selection. Comments:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Our agency could benefit from additional guidance on project selection. Comments:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Our agency has published guidelines on treatment selection. Comments:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Our agency could benefit from additional guidance on treatment selection. Comments:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Our agency uses nationally-available guidance from FHWA or other agencies. Comments:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Our preservation toolbox includes a broad range of preservation treatments. Comments:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Our agency has goals for our pavement preservation program. Please describe the goals or provide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

a link:				
h. Our preservation goals are widely known and understood within the agency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
i. A history of pavement preservation treatments is stored in a central database (such as a pavement management or maintenance management system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
j. The conditions that trigger the application of a pavement preservation treatment typically have not changed by the time the preservation treatment is applied.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
k. The expected effect of existing pavement conditions on preservation treatment performance is well understood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
l. Our existing tools allow us to determine the cost-effectiveness of each pavement preservation treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please describe the tools or provide a link:				
m. Our existing tools allow us to determine the life of each treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
n. Our existing tools allow us to determine the optimal time/condition to apply each preservation treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
o. Our existing tools track previous preservation treatments applied to a section.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:				
p. Our existing tools allow us to reliably estimate pavement preservation needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
q. We have processes in place to ensure the quality of pavement preservation projects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				
r. Our preservation program can differentiate treatments applied in a stop-gap manner from those intended to extend pavement life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments:				

9. Using the following table, identify the degree to which the following types of information are used by your agency to make pavement preservation project and treatment selection decisions. The last column allows you to identify topics that would benefit from additional guidance. Comment boxes are provided for you to explain your responses.

	Regularly Use	Sometimes Use	Do Not Use	Would Like To Use	Would Benefit From Additional Guidance on This Topic
a. Individual distress data (such as cracking, rutting, patching, faulting)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Comments:					
b. Pavement condition ratings (such as Pavement Surface Rating or Pavement Condition Index)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Comments:					
c. Ride information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

(such as International Roughness Index or IRI)					
Comments:					
d. Pavement friction data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Comments:					
e. Pavement deflection testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Comments:					
f. Ground penetrating radar (GPR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Comments:					
g. Other data (please explain in comment box):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>
Comments:					

Section 3: Program Monitoring

The questions in this section help FHWA determine the agencies satisfaction with the pavement preservation information that is monitored on a regular basis.

10. How often do you monitor the performance of your pavement preservation treatments?

- a. Annually
- b. Every 2 years
- c. Every 3 years
- d. Preservation treatment performance is not monitored
- e. Other (please explain)

11. Which of the following statements best represents the source of pavement condition information used to monitor pavement preservation performance? [Select all that apply]

- a. Pavement condition surveys conducted for pavement management purposes.
- b. Maintenance management surveys conducted by District/Region personnel.
- c. Maintenance management surveys conducted by a contractor.
- d. Specialized inspections for research or other purposes.
- e. Other (please explain)

Comments: _____

12. Which of the following performance models has your agency established for your preservation treatments? [Select all that apply]
- Performance models for asphalt-surfaced pavement preservation treatments.
 - Performance models for concrete-surfaced pavement preservation treatments.
 - Performance models which reflect the use of treatments applied in a proactive vs. reactive application

13. Using the information available to you today, which of the following measures do you feel could be reported with confidence? [Select all that apply] Use the Comment box to explain your responses.

- The increase in pavement condition expected from planned investments in pavement preservation.
- The reduction in wet-weather accidents associated with pavement preservation investments.
- The total level of investment in pavement preservation and the lane miles affected.
- The number of miles treated per year.
- The reduction in life cycle cost realized from pavement preservation treatments.
- The benefit to cost ratio associated with pavement preservation treatments.
- The expected service life extension associated with a pavement preservation treatment.
- Other (please explain in the Comment box)

Comments: _____

Section 4: Project and Program Planning

Questions in this section assess the degree to which FHWA guidance and tools are satisfactory for supporting your practices related to project selection and program planning.

14. Which of the following statements represent your agency's approach to pavement preservation project selection? [Select all that apply]
- Pavement management recommendations identify good candidates for pavement preservation.
 - Pavement preservation projects are programmed in clusters to improve cost-effectiveness.
 - The Districts/Regions select projects based on local knowledge.
 - Pavement preservation projects are matched to a list of recommendations from the pavement management system to ensure that treatments are used where they will be most effective.
 - Districts program pavement preservation treatments to meet mileage or condition targets.
 - District programming is based on spending a specified dollar amount or achieving a percent of budget target.
 - Preservation treatments are applied and/or re-applied according to an established frequency (e.g., 2 years after resurfacing, or every 5 years) (please explain in the Comment box)
 - Other (please explain in the Comment box).

Comments:

15. Which of the following statements best represents your approach to setting pavement preservation budgets? [Select the best answer]
- a. There is no specific preservation budget.
 - b. Our annual pavement preservation budget is: _____
 - c. The budget is based largely on the needs generated by the pavement management system.
 - d. The budget is based on previous years' budgets.
 - e. The budget is based on District/Region recommendations.
 - f. The preservation budget is a fixed (or variable) percentage of the overall budget.
 - g. Other (please explain in the Comment box)

Comments:

16. How many years after project identification is a typical pavement preservation project constructed? [Select the best answer]
- a. Within 1 year.
 - b. Within 1-3 years.
 - c. Within 3-5 years.
 - d. More than 5 years.

Section 5: Opportunities

These questions and comments help identify beneficial opportunities for continuing FHWA support for your pavement preservation program.

17. What obstacles has your agency faced that have in some way hindered the effectiveness of your pavement preservation program? [Select all that apply]
- a. Construction quality issues.
 - b. Contractor unavailability.
 - c. Delays due to design issues.
 - d. Inadequate funding.
 - e. Poor treatment selection.
 - f. Significant treatment failure(s).
 - g. Inability to demonstrate treatment benefits or effectiveness.
 - h. Lack of agency-wide support for preservation.
 - i. Internal resistance.
 - j. Preference for capital projects
 - k. Pressure to address more urgent needs.
 - l. Customer complaints.
 - m. Political interference.
 - n. Lack of effective guidance.
 - o. Lack of effective performance models.
 - p. Other (please explain in Comment box)
 - q. Pavement Preservation Definitions
 - r. Benefits not well documented
 - s. Require initial and annual funding

- t. Public perception
- u. Agency Maintenance Resistance
- v. Training on Pavement Preservation Treatment Equipment Capabilities and Operation
- w. Pavement Preservation Treatments Construction
- x. Pavement Preservation Treatments Quality Assurance

Comments:

18. What change(s) are you making to your program or would make if there were no constraints in place? Use the Comment box to record your answer.

Comments: