ODOT Development of Maintenance Practices for F-Mix Asphalt Survey Ci3 Instrument

CATI ON
REVIEW CtrlR SQN right
Q:HELLO1 T: INTERVIEWER NOTE: WORDS IN BRACKETS "[]" ARE OPTIONAL WHILE PAIRS OF WORDS OR PHRASES IN PARENTHESES "()" ARE EITHER/OR CHOICES. CAPITALIZED WORDS ARE NOT READ ALOUD.
[Hello.] (Is this/May I please speak with)?
1> R ON PHONE CTRL-END> WRONG NUMBER, R NOT AVAILABLE, ETC. I: key 1
Q:HELLO2 T:
[Hello.] (ODOT/The Oregon Department of Transportation) needs your opinions about working with F-mix asphalt, and has asked the University of Oregon Survey Research Laboratory to conduct the survey. I am, a professional interviewer calling from the University of Oregon and I want to assure you that this survey is completely confidential and voluntary, and it should take just fifteen minutes to complete. Do you have any questions before we begin?
PROBE: Did your District Manager notify you about the survey? IF R WAS NOT NOTIFIED: I have a copy of the e-mail that was sent to your Manager right here. Let me read it to you.
1 NO QUESTIONS> CONTINUE QUESTIONS> SEE ANSWERS TO COMMONLY ASKED QUESTIONS CTRL-END> ARRANGE CALLBACK.
[Hello.] (Is this/May I please speak with)? This is calling from the University of Oregon Survey Research Laboratory. I'm calling back to finish the survey about F-mix that we previously started.
1> R ON LINE CTRL-END> R UNAVAILABLE I: key 1
Q:HELLO3 T: Thank you. [I'd like to begin the survey now.]

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1 --> R CONSENTS --> CONTINUE
I:
key 1
Q:YEARS
T:
First, how many years have you worked on
asphalt pavement maintenance [altogether]?
OPEN-ENDED NUMBER, 0-60
PLEASE ENTER EXACT YEARS, NO DECIMALS, 0-60
0 --> LESS THAN 1 YEAR
60 --> 60 OR MORE YEARS
97 REFUSED
98 DON'T KNOW
99 NO ANSWER
I:
num 0 99 2 0 25 25
if (ans > 60)
if (ans < 97) REASK
endif
qal noqal
Q:EASYTYPE
In the years you have worked in this field, what type of asphalt
have you found easiest to maintain -- dense graded or open graded?
1 DENSE GRADED
2 OPEN GRADED
3 [IF VOLUNTEERED] OTHER
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-3,7-9
cmdi LOCATN "LOCATION" 1
cmdi REGION "REGION" 1
cmdi POSITION "POSITION" 1
cmdi COMMON "COMMON" 1
Q:EASYWHY
T:
Why [is that asphalt easiest to maintain]?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
opn 10 5 25 70
Q:DIFFTYPE
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What type of asphalt have you found most difficult to maintain --
dense graded or open graded?
1 DENSE GRADED
2 OPEN GRADED
3 [IF VOLUNTEERED] OTHER
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-3,7-9
Q:DIFFWHY
Why [is that asphalt difficult to maintain]?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
opn 10 5 25 70
Q:DISTRICT
T:
What number is your ODOT maintenance district?
NOTE: THERE IS NO DISTRICT 6.
1 DISTRICT 1
2 DISTRICT 2A
3 DISTRICT 2B
4 DISTRICT 2C
5 DISTRICT 3
6 DISTRICT 4
7 DISTRICT 5
8 DISTRICT 7
9 DISTRICT 8
10 DISTRICT 9
11 DISTRICT 10
12 DISTRICT 11
13 DISTRICT 12
14 DISTRICT 13
15 DISTRICT 14
97 REFUSED
98 DON'T KNOW
99 NO ANSWER
num 1 99 2 0 25 25
if (ans > 15)
if (ans < 97) REASK
endif
```

Q:LOCATE1

T:

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T:
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Does your maintenance work cover the entire district or just part of it? PROBE: Your maintenance work in the past year or so.

1 ENTIRE --> SKIPTO STRESS1 2 PART

7 REFUSED --> SKIPTO STRESS1 8 DON'T KNOW

9 NO ANSWER --> SKIPTO STRESS1

I:

key 1,2,7-9

if (ans = 1) skipto STRESS1

if (ans = 7) skipto STRESS1

if (ans = 9) skipto STRESS1

Q:LOCATE2

T٠

What area in the District does your maintenance work cover?

OPEN-ENDED

PLEASE TYPE IN EXACT RESPONSE BELOW

I:

opn 10 5 25 70

Q:STRESS1

T

Now I need to ask you about several types of pavement distress on F-mix you have seen in your (district / area) in the past two years. For each one, please tell me whether you have seen it in your (district / area), and, if you have seen it, how prevalent that type of distress is on the highways where you work. I need to know if it is rare, scattered, or pervasive throughout your (district / area). The first one is raveling.

PROBE: Have you seen raveling in your (district / area)?
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE: Raveling refers to the asphalt surface becoming irregular because the aggregate and asphalt binder has worn away. The surface texture is rough and pitted.

1 NOT SEEN IT

2 RARE

3 SCATTERED

4 PERVASIVE

7 REFUSED

8 DON'T KNOW

9 NO ANSWER

I:

key 1-4,7-9

Q:STRESS2

T:

Have you seen clogging on F-mix pavement (in your district / area)?

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and the voids are filling.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS3
[(What about / Have you seen)] gouging or scarring [on F-mix pavement
in your (district / area)]?
PROBE: For example, from snow plows.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS4
[(What about / Have you seen)] deformation rutting from heavy trucks
[on F-mix pavement in your (district / area)]?
PROBE: This refers to some trucks' heavy weight deforming
the pavement into ruts.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
```

I:

PROBE: Clogging is when the asphalt is no longer porous

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key 1-4,7-9
O:STRESS5
T:
[(What about / Have you seen)] rutting from studded tires [on F-mix pavement
in your (district / area)]?
PROBE: This refers to studded tires (used for snow and ice) eroding ruts
into the pavement surface.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-4,7-9
Q:STRESS6
T:
[(What about / Have you seen)] thermal cracking or transverse cracks
[on F-mix pavement in your (district / area)]?
PROBE: Temperature variations [like freeze-thaw] can cause this cracking.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-4,7-9
Q:STRESS7
[(What about / Have you seen)] alligator cracking [on F-mix pavement
in your (district / area)]?
PROBE: An inadequate road structure can cause this all-over cracking
[that looks like a puzzle].
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
```

2 RARE 3 SCATTERED

```
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-4,7-9
Q:STRESS8
[(What about / Have you seen)] reflective cracking [on F-mix pavement
in your (district / area)]?
PROBE: This happens when a crack beneath an overlay spreads to the surface.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS9
[(What about / Have you seen)] stripping [on F-mix pavement
in your (district / area)]?
PROBE: Stripping is separation of the aggregate and the asphalt binder
caused by the inability of the asphalt to stick to aggregate in wet conditions
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS10
[(What about / Have you seen)] fat spots becoming a problem [on F-mix pavement
in your (district / area)]?
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PROBE: For example, when there is too much asphalt binder in places. PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?

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PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS11
T:
[(What about / Have you seen)] icing problems [on F-mix pavement
in your (district / area)]?
PROBE: That is, more icing than you would expect when compared to
a dense graded pavement.
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-4,7-9
Q:STRESS12
[(What about / Have you noticed)] a noisy ride [on F-mix pavement
in your (district / area)]?
PROBE: Is the road unusually noisy as you drive over it?
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-4,7-9
Q:STRESS13
T:
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in your (district / area)]?
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS14
[(What about / Have you noticed)] a bumpy ride [on F-mix pavement
in your (district / area)]?
PROBE: Is the road unusually bumpy as you drive over it?
PROBE FOR YES: Is it rare, scattered, or pervasive [in your (district / area)]?
PROBE FOR YES: How prevalent is (it / that)?
1 NOT SEEN IT
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,7-9
Q:STRESS15
Have you noticed any other pavement distresses on F-mix asphalt
in your (district / area)?
1 YES
2 NO --> SKIPTO FOGSEAL
7 REFUSED --> SKIPTO FOGSEAL
8 DON'T KNOW --> SKIPTO FOGSEAL
9 NO ANSWER --> SKIPTO FOGSEAL
I:
key 1,2,7-9
if (ans > 1) skipto FOGSEAL
Q:STRSS15A
What are those [other distresses you have seen]?
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[(What about / Have you noticed)] pot holes [on F-mix pavement

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PROBE FOR MULTIPLE ANSWERS: Which one is most common or problematic?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
NOTE: RECORD OTHERS UNDER INTERVIEWER OBSERVATIONS.
opn 10 5 25 70
Q:STRSS15B
T:
Is it rare, scattered, or pervasive [on F-mix pavement
in your (district / area)]?
1 [DO NOT USE --> CATEGORY REMOVED FOR CONSISTENCY WITH OTHER Q'S]
2 RARE
3 SCATTERED
4 PERVASIVE
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 2-4,7-9
Q:FOGSEAL
Do you ever use fog-seals on F-mix for maintenance in your (district / area)?
PROBE: Fog-seal is a thin liquid coating of asphalt that seals
and rejuvenates asphalt binder.
1 YES
2 NO --> SKIPTO PREVEN1
7 REFUSED --> SKIPTO PREVEN1
8 DON'T KNOW --> SKIPTO PREVEN1
9 NO ANSWER --> SKIPTO PREVEN1
I:
key 1,2,7-9
if (ans > 1) skipto PREVEN1
Q:FOGPCT
What percentage of the F-mix paved roads are fog sealed
in your (district / area)?
PROBE: Would you say fifty percent? Thirty-three percent?
Twenty-five percent? Something else?
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OPEN-ENDED NUMBER.

ENTER EXACT NUMBER, NO DECIMALS 5-95.

96 --> 96 PERCENT OR MORE

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97 REFUSED
98 DON'T KNOW
99 NO ANSWER
num 1 99 2 0 25 25
Q:FOGOFT
How often are those pavements fog-sealed, on average?
PROBE: Would you say every year, every three years,
[every five years,] [or something else]?
OPEN-ENDED NUMBER.
ENTER EXACT NUMBER, NO DECIMALS 1-20.
96 --> OTHER--SPECIFY
97 REFUSED
98 DON'T KNOW
99 NO ANSWER
I:
num 1 99 2 0 25 25
oth 96 17 30 22 70
if (ans > 20)
if (ans < 96) REASK
endif
Q:FOGLONG1
T:
Do you have any convincing evidence that
fog sealing prolongs the life of F-mix?
2 NO --> SKIPTO FOGLONG2
7 REFUSED --> SKIPTO FOGLONG2
8 DON'T KNOW --> SKIPTO FOGLONG2
9 NO ANSWER --> SKIPTO FOGLONG2
I:
key 1,2,7-9
if (ans > 1) skipto FOGLONG2
Q:FOGLONGA
What is that [evidence that fog sealing prolongs
the life of F-mix]?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
opn 10 5 25 70
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Q:FOGLONG2
T:
Do you have any convincing evidence that fog sealing does not prolong
the life of F-mix?
1 YES
2 NO --> SKIPTO PREVEN1
7 REFUSED --> SKIPTO PREVEN1
8 DON'T KNOW --> SKIPTO PREVEN1
9 NO ANSWER --> SKIPTO PREVEN1
key 1,2,7-9
if (ans > 1) skipto PREVEN1
Q:FOGLONGB
T:
What is that [evidence that fog sealing does not prolong the life of F-mix]?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
opn 10 5 25 70
Q:PREVEN1
From your years of experience, what do you believe
is the best preventative maintenance for F-mix?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
opn 10 5 25 70
Q:PREVEN2
Do you have any ideas about how preventative maintenance
for F-mix could be improved?
PROBE FOR GEOGRAPHIC AREA: Anywhere F-mix is used
[not just in your (district / area)].
2 NO --> SKIPTO QUANT1
7 REFUSED --> SKIPTO QUANT1
8 DON'T KNOW --> SKIPTO QUANT1
9 NO ANSWER --> SKIPTO QUANT1
I:
key 1,2,7-9
if (ans > 1) skipto QUANT1
Q:PREVENA
T:
```

What are those [ideas you have [for how to improve preventative maintenance for F-mix]]?

OPEN-ENDED

PLEASE TYPE IN EXACT RESPONSE BELOW

I٠

opn 10 5 25 70

Q:QUANT1

T٠

[We are over halfway done with the survey now, and I would like to thank you sincerely for your time and effort so far.] Now, please think about your local suppliers of F-mix. If they are not already producing F-mix for a construction contract, will they provide you with less than sixty tons?

PROBE: Will they make you a special batch of F-mix that is less than 60 tons?

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1 YES
2 NO --> SKIPTO SUCC1
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7 REFUSED --> SKIPTO SUCC1 8 DON'T KNOW --> SKIPTO SUCC1 9 NO ANSWER --> SKIPTO SUCC1 I: key 1,2,7-9 if (ans > 1) skipto SUCC1

Q:QUANT2

T

Will they supply you with less than thirty tons?

1 YES 2 NO --> SKIPTO SUCC1

7 REFUSED --> SKIPTO SUCC1 8 DON'T KNOW --> SKIPTO SUCC1 9 NO ANSWER --> SKIPTO SUCC1 I: key 1,2,7-9 if (ans > 1) skipto SUCC1

Q:QUANT3

T:

Will they supply you with less than ten tons?

1 YES 2 NO

7 REFUSED 8 DON'T KNOW 9 NO ANSWER I: key 1,2,7-9

Q:SUCC1

T:

Now I need to ask you about the success of various maintenance techniques you use. The first one is screed patching with C-mix over F-mix. Generally speaking, is this maintenance technique not at all successful, not very successful, somewhat successful, or completely successful?

PROBE: By screed patching we mean using a box that you drag behind a truck to level a pile of material.

1 NOT AT ALL SUCCESSFUL 2 NOT VERY SUCCESSFUL 3 SOMEWHAT SUCCESSFUL

4 COMPLETELY SUCCESSFUL

5 [IF VOLUNTEERED] HAVE NOT USED

6 [IF VOLUNTEERED] IT DEPENDS

7 REFUSED

8 DON'T KNOW

9 NO ANSWER

I:

key 1-9

Q:SUCC2

T:

How successful is screed patching with D-mix over F-mix?

PROBE: [Generally speaking, is this maintenance technique] not at all successful, not very successful, somewhat successful, or completely successful?

PROBE: By screed patching we mean using a box that you drag behind a truck to level a pile of material.

1 NOT AT ALL SUCCESSFUL

2 NOT VERY SUCCESSFUL

3 SOMEWHAT SUCCESSFUL

4 COMPLETELY SUCCESSFUL

5 [IF VOLUNTEERED] HAVE NOT USED

6 [IF VOLUNTEERED] IT DEPENDS

7 REFUSED

8 DON'T KNOW

9 NO ANSWER

I:

key 1-9

Q:SUCC3

T

[(What about / How successful is)] blade patching with C-mix over F-mix?

PROBE: [Generally speaking, is this maintenance technique] not at all successful, not very successful, somewhat successful, or completely successful?

PROBE: By blade patching we mean using grader blade, like a snowplow, to level a pile of asphalt.

1 NOT AT ALL SUCCESSFUL

```
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-9
Q:SUCC4
[(What about / How successful is)] blade patching with D-mix over F-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
PROBE: By blade patching we mean using grader blade, like a snowplow,
to level a pile of asphalt.
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-9
Q:SUCC5
T:
[(What about / How successful is)] machine patching with B-mix over F-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
PROBE: By machine patching we mean using a paving machine.
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-9
```

```
O:SUCC6
T:
[(What about / How successful is)] machine patching with C-mix over F-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
PROBE: By machine patching we mean using a paving machine.
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-9
Q:SUCC7
[(What about / How successful is)] machine patching with F-mix over F-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
PROBE: By machine patching we mean using a paving machine.
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-9
Q:SUCC8
[(What about / How successful is)] inlay patching with C-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
1 NOT AT ALL SUCCESSFUL
```

2 NOT VERY SUCCESSFUL 3 SOMEWHAT SUCCESSFUL

```
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-9
Q:SUCC9
T:
[(What about / How successful is)] inlay patching with F-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-9
Q:SUCC10
(What about / How successful is) a procedure where you apply tack
to the repair area, place open-graded rock in the repair area,
spray with liquid asphalt, and then compact it.
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-9
Q:SUCC11
```

T:

[(What about / How successful is)] an emulsion chip seal?

PROBE: [Generally speaking, is this maintenance technique] not at all successful, not very successful, somewhat successful, or completely successful?

1 NOT AT ALL SUCCESSFUL

2 NOT VERY SUCCESSFUL

3 SOMEWHAT SUCCESSFUL

4 COMPLETELY SUCCESSFUL

5 [IF VOLUNTEERED] HAVE NOT USED

6 [IF VOLUNTEERED] IT DEPENDS

7 REFUSED

8 DON'T KNOW

9 NO ANSWER

I:

key 1-9

Q:SUCC12

Т

[(What about / How successful is)] hot asphalt chip seal?

PROBE: [Generally speaking, is this maintenance technique] not at all successful, not very successful, somewhat successful, or completely successful?

1 NOT AT ALL SUCCESSFUL

2 NOT VERY SUCCESSFUL

3 SOMEWHAT SUCCESSFUL

4 COMPLETELY SUCCESSFUL

5 [IF VOLUNTEERED] HAVE NOT USED

6 [IF VOLUNTEERED] IT DEPENDS

7 REFUSED

8 DON'T KNOW

9 NO ANSWER

I:

key 1-9

Q:SUCC13

T.

[(What about / How successful is)] crack sealing?

PROBE: Is this generally not at all successful, not very successful, somewhat successful, or completely successful?

1 NOT AT ALL SUCCESSFUL

2 NOT VERY SUCCESSFUL

3 SOMEWHAT SUCCESSFUL

4 COMPLETELY SUCCESSFUL

5 [IF VOLUNTEERED] HAVE NOT USED

6 [IF VOLUNTEERED] IT DEPENDS

7 REFUSED

8 DON'T KNOW

```
9 NO ANSWER
I:
key 1-9
Q:SUCC14
[(What about / How successful is)] profiling with a grinder?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-9
Q:SUCC15
[(What about / How successful is)] pot hole repair with pre-mix?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
or completely successful?
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-9
O:SUCC16
T:
[(What about / How successful is)] placing aggregate in a pothole,
spraying with Percol, and letting it set?
PROBE: [Generally speaking, is this maintenance technique]
not at all successful, not very successful, somewhat successful,
```

1 NOT AT ALL SUCCESSFUL

or completely successful?

```
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [IF VOLUNTEERED] HAVE NOT USED
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
key 1-9
Q:SUCC17
Have you ever used any other kind of road maintenance technique
in your (District/Area) [than those I just asked you about]?
NOTE: AT ANY TIME, ON ANY JOB
1 YES
2 NO --> SKIPTO WINMIX
7 REFUSED --> SKIPTO WINMIX
8 DON'T KNOW --> SKIPTO WINMIX
9 NO ANSWER --> SKIPTO WINMIX
I:
key 1,2,7-9
If (ANS <> 1) Skipto WINMIX
Q:SUCC17A
What is that [other kind of road maintenance technique that you have used]?
OPEN-ENDED
PLEASE TYPE IN EXACT RESPONSE BELOW
I:
opn 10 5 25 70
Q:SUCC17B
Generally speaking, is this maintenance technique not at all successful,
not very successful, somewhat successful, or completely successful?
1 NOT AT ALL SUCCESSFUL
2 NOT VERY SUCCESSFUL
3 SOMEWHAT SUCCESSFUL
4 COMPLETELY SUCCESSFUL
5 [DO NOT USE --> CATEGORY REMOVED FOR CONSISTENCY WITH OTHER Q'S]
6 [IF VOLUNTEERED] IT DEPENDS
7 REFUSED
8 DON'T KNOW
9 NO ANSWER
I:
key 1-4,6-9
```

```
Q:WINMIX
```

T:

I need to end the survey by asking you three open-ended questions. As you know, winter maintenance for F-mix presents different challenges

than winter maintenance for dense-graded asphalt concrete pavements.

What procedures have you found to be effective in maintaining F-mix pavements during the winter?

PROBE: Is there anything else?

OPEN-ENDED

PLEASE TYPE IN EXACT RESPONSE BELOW

I:

opn 12 5 25 70

Q:BEST

T:

From your perspective, what is the one best thing about F-mix asphalt?

OPEN-ENDED

PLEASE TYPE IN EXACT RESPONSE BELOW

T٠

opn 10 5 25 70

Q:IMPROVE

T:

If there is one thing you could change or improve about F-mix, what would it be?

OPEN-ENDED

PLEASE TYPE IN EXACT RESPONSE BELOW

I:

opn 15 5 25 70

Q:ENDING

Τ:

That is the end of the survey. On behalf of ODOT, I'd like to

thank you sincerely for your time and opinions on these questions. Good-bye.

KEY "1" TO CONTINUE

I:

key 1

O:INTOBS

T:

CONGRATULATIONS, INTERVIEWER! YOU HAVE COMPLETED THE INTERVIEW!

PLEASE WRITE ANY COMMENTS BELOW.

T٠

opn 10 5 25 70

Q:INTID

T:

```
PLEASE ENTER YOUR I.D. NUMBER BELOW TO FINISH THE INTERVIEW.

I:
num 1 700 3 0 25 25
CPL
DISPOS = 26
ENDQUEST

Q:NOQAL
T:
ALL RESPONDENTS PREQUALIFIED--YOU SHOULD NEVER SEE THIS MESSAGE
I:
key 1
CPL
DISPOS = 22
ENDQUEST
```