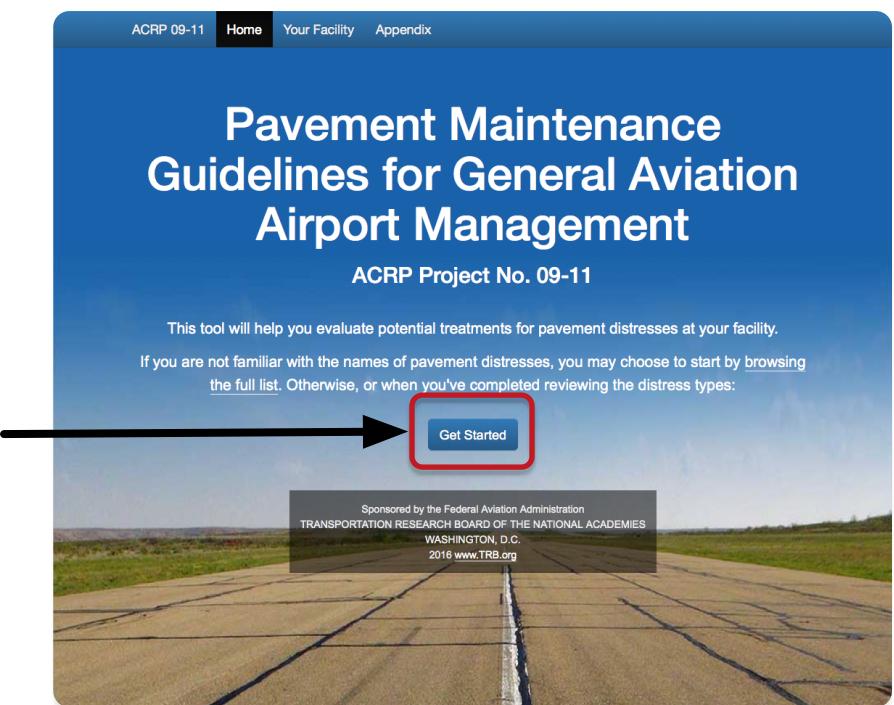


Homepage for the ACRP Pavement Maintenance Guidelines for General Aviation Airport Management Website

Choose **Get Started** or **Your Facility** from the navigation menu at top to begin.



Determining and Evaluating Your Options

Enter an optional, identifying word or phrase to designate the feature being evaluated.

The screenshot shows the 'Your Facility' evaluation form. At the top, there is a navigation bar with links for 'ACRP 09-11', 'Home', 'Your Facility', 'Appendix', and 'Clear'. The main title 'Your Facility' is displayed in bold. Below it, the section 'Determining and Evaluating Your Options' is shown. A descriptive text block states: 'If you are not familiar with the names of pavement distresses, you may choose to start by browsing the full list. Otherwise, please proceed below.' To the right of this text is a form field labeled 'Feature Identifier (Optional)' with the placeholder 'For example, Runway, Taxiway, Apron'. A large black arrow points to this field. Below this is a dropdown menu labeled 'State (for climate determination)'. Further down are two more dropdown menus: 'FAA Airport Classification' and 'Pavement Type (asphalt or concrete)'. At the bottom of the form is a blue button labeled '+ Add / Identify a Distress'.

Determining and Evaluating Your Options



Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Enter your state.
This is a required
field.



The screenshot shows a form for entering facility details. At the top, there's a "Feature Identifier (Optional)" field containing "Runway". Below it is a dropdown menu labeled "State (for climate determination)" with a red box around it. Other dropdown menus include "FAA Airport Classification" and "Pavement Type (asphalt or concrete)". At the bottom is a blue button labeled "+ Add / Identify a Distress". The background features a photograph of a runway with a prominent crack.

Note that for
some states,
adding a county
will be required to
determine your
facility's climate
zone.



The screenshot shows the same form with the "State (for climate determination)" dropdown menu open. The menu is titled "Apache" and lists various counties: Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Navajo, Pima, Pinal, Santa Cruz, Yavapai, and Yuma. The "Apache" option is highlighted with a red box. The background image of the runway is partially visible behind the dropdown menu.

Determining and Evaluating Your Options

Pick your facility's FAA Airport Classification.

Note that your entries up to this point will be retained on your computer or tablet for subsequent evaluations with the tool.

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron

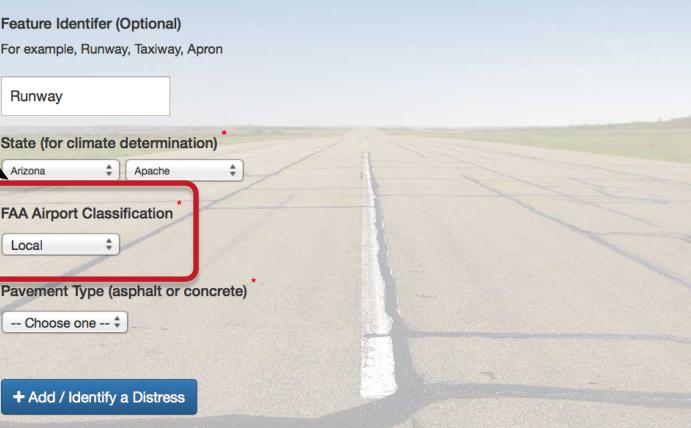
Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)
-- Choose one --

+ Add / Identify a Distress



Note that when you put your cursor over each choice, details are provided to assist you.

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron

Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification

-- Choose one --

-- Choose one --

Regional
National
Basic
Local

Pavement Type (asphalt or concrete)
-- Choose one --

+ Add / Identify a Distress

FAA Airport Classification
(all numbers are annualized)

National

1. 5,000+ instrument operations; 11+ based jets; 20+ international flights, or 500+ interstate departures; or 2. 10,000+ enplanements and at least 1 charter enplanement by a large certificated air carrier; or 3. 500+ million pounds of landed cargo weight.

Criteria Used to Define the New Regional Category (all numbers are annualized)

9. The airport has 10+ instrument operations (11+ based jets) and 10+ domestic flights over 600 miles; 1,000+ instrument operations; 1+ based jet, or 100+ based aircraft; or 2. The airport is located in a metropolitan or micropolitan statistical area, and the airport meets the definition of commercial service.

Criteria Used to Define the New Local Category (all numbers are annualized)

1. 10+ instrument operations and 15+ based aircraft; or 2. 2,000+ passenger enplanements.

Criteria Used to Define the New Basic Category (all numbers are annualized)

1. 10+ based aircraft; or 2. 5+ based helicopters; or 3. The airport is located 30+ miles from the nearest NPIAS airport; or 4. The airport is identified and used by the U.S. Forest Service, or U.S. Marshals, or U.S. Customs and Border Protection (designated, international, or landing rights), or U.S. Postal Service (air stops), or has Essential Air Services; or 5. The airport is a new or replacement facility activated after January 1, 2001; and 6. Publicly owned or privately owned and designated as a reliever with a minimum of 90 based aircraft.

Determining and Evaluating Your Options

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

The screenshot shows the 'Your Facility' page with several input fields: 'Feature Identifier (Optional)' (Runway), 'State (for climate determination)' (Arizona, Apache), 'FAA Airport Classification' (Local), and 'Pavement Type (asphalt or concrete)' (asphalt). A dropdown menu titled '-- Choose one --' is open, showing 'asphalt' and 'concrete' as options. A red box highlights the 'Pavement Type' dropdown, and a black arrow points from the text 'Choose the type of pavement used in the feature being evaluated.' to it.

Choose the type of pavement used in the feature being evaluated.

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

The screenshot shows the 'Your Facility' page with the same input fields as the previous screenshot. Below them, a section titled 'DISTRESS #' lists various distress types under '1 Identify a Distress'. The list includes: Cracking (Longitudinal info, Transverse info, Alligator info, Block info, Edge info, Reflection info), Surface Distress (Weathering info, Raveling info, Patching info, Roughness info), and a '+ Add / Identify a Distress' button at the bottom. A red box highlights the 'Add / Identify a Distress' button, and a black arrow points from the text 'Click Add/Identify a Distress to begin describing the distress(es) observed in the current feature. Observe that a list of distresses possible for the chosen pavement type will appear.' to it.

Click **Add/Identify a Distress** to begin describing the distress(es) observed in the current feature. Observe that a list of distresses possible for the chosen pavement type will appear.

Determining and Evaluating Your Options

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron

Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)
asphalt

ISTRESS #1

1 Identify a Distress

Joint Problems
Joint Seal
Damage Info
Joint/Corner
Spall Info

Cracking
Mid-panel Info
Corner Break Info
Shattered Slab Info

Surface Distress
Weathering Info
Raveling Info
Patching Info
Roughness Info

Cracking » Block

Block cracks are interconnected cracks that divide the pavement into approximately rectangular pieces. The blocks may range in size from approximately 1 by 1 foot to 10 by 10 feet (0.3 by 0.3 meters to 3 by 3 meters). Block cracking is caused mainly by shrinkage of the asphalt concrete (AC) and daily temperature cycling (which results in daily stress/strain cycling). It is not load associated. The occurrence of block cracking usually indicates that the asphalt has hardened significantly. Block cracking normally occurs over a large proportion of pavement area but sometimes will occur in non-traffic areas. This type of distress differs from alligator cracking in that alligator cracks form smaller, multisided pieces with sharp angles. Also, unlike block cracks, alligator cracks are caused by repeated traffic loadings and, therefore, are located only in traffic areas (i.e., wheel paths).

+ Add / Identify a Distress

Note that when you move your cursor over the distress names, an information box will appear describing the distresses.

Note the differing distresses associated with concrete versus asphalt pavements.

Determining and Evaluating Your Options

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron
Runway

State (for climate determination)*
Arizona Apache

FAA Airport Classification*
Local

Pavement Type (asphalt or concrete)*
asphalt

DISTRESS #1

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Buckling info
Patching info
Roughness info

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High



+ Add / Identify a Distress

Select an appropriate choice under **Select an Amount & Severity**.

When you choose a distress, a second group of choices will appear, as well as photos of the distress. Click a photo for a larger view to help you determine which distress your features is experiencing.

Determining and Evaluating Your Options

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron

Runway

State (for climate determination)*
Arizona Apache

FAA Airport Classification*
Local

Pavement Type (asphalt or concrete)*
asphalt

DISTRESS #1

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High




+ Add / Identify a Distress

Block cracking Moderate severity

	Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended	Asphalt Overlay/Mill+overlay	\$ 7.5 / yd ²	419	0.10
Acceptable	Crack Seal/fill	\$ 0.75 / linear ft	68	0.07

Use the Ballpark Benefit/Cost Estimator for all treatments?

[View / Print / Save a PDF Report](#)

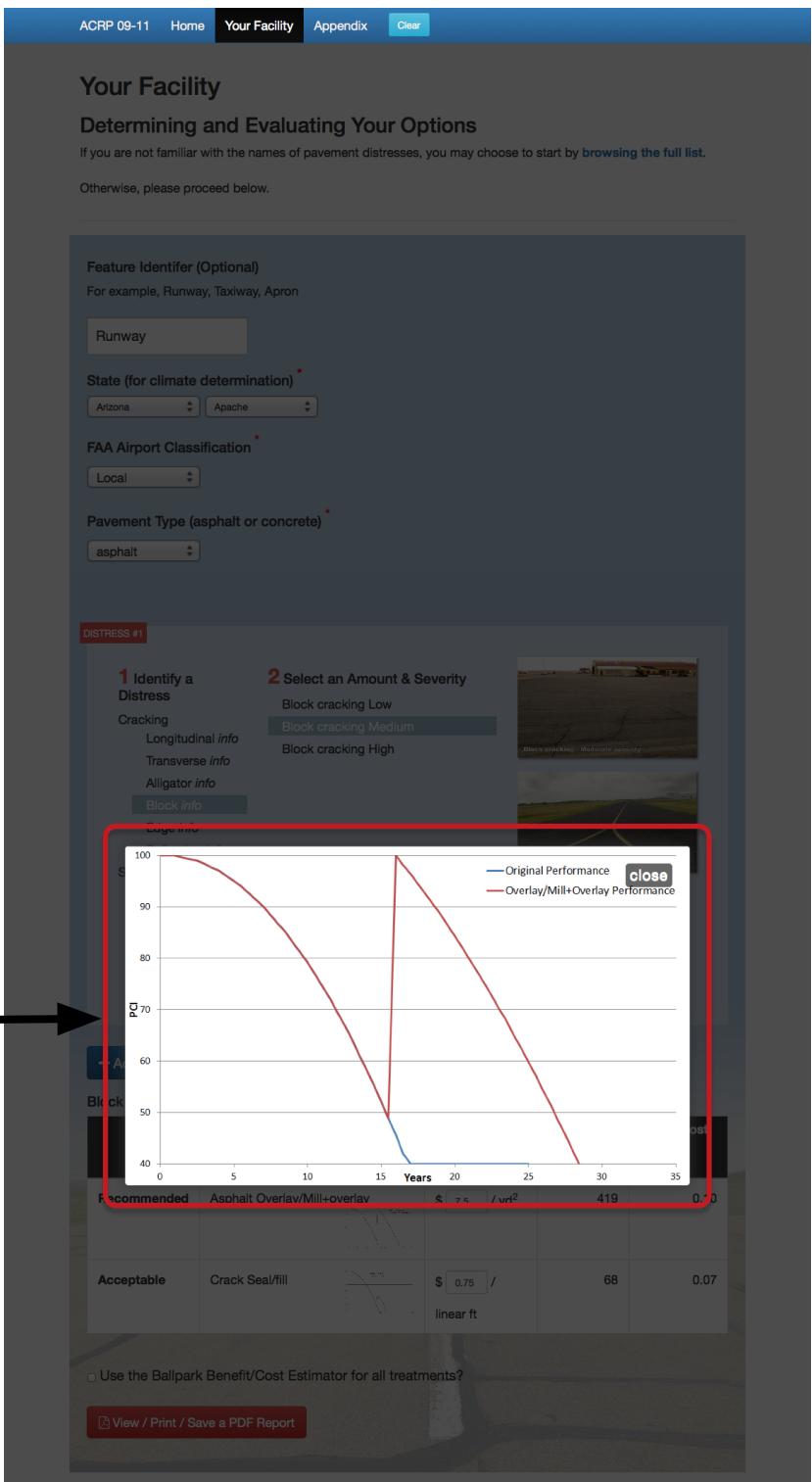
When you do so, a summary table appears listing a recommended and acceptable treatment.

In the treatment cells, click the graph icon to view a PCI curve, indicating the estimated increased performance that the treatment can do to extend the life of the pavement being evaluated.

Determining and Evaluating Your Options

See this project's Guidebook for information about the relative benefit and benefit/cost numbers.

If the current feature is experiencing just one distress, skip to page 10 to use the Ballpark Estimator.



Determining and Evaluating Your Options

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by browsing the full list.

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxway, Apron

Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)
asphalt

DISTRESS #1

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High

DISTRESS #2

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High

DISTRESS #3

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Medium
A few longitudinal cracks, High
Many longitudinal cracks, Low
Many longitudinal cracks, Medium
Many longitudinal cracks, High

DISTRESS #4

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Medium
A few longitudinal cracks, High
Many longitudinal cracks, Low
Many longitudinal cracks, Medium
Many longitudinal cracks, High

+ Add / Identify a Distress

Block cracking Moderate severity

	Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended	Asphalt Overlay/Mill+overlays	\$ 7.5 / yd ²	419	0.10
Acceptable	Crack Seal/FI	\$ 0.75 / linear ft	68	0.07

Use the Balpark Benefit/Cost Estimator for all treatments?

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ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by browsing the full list.

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxway, Apron

Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)
asphalt

DISTRESS #1

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High

DISTRESS #2

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High

DISTRESS #3

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Medium
A few longitudinal cracks, High
Many longitudinal cracks, Low
Many longitudinal cracks, Medium
Many longitudinal cracks, High

DISTRESS #4

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Medium
A few longitudinal cracks, High
Many longitudinal cracks, Low
Many longitudinal cracks, Medium
Many longitudinal cracks, High

+ Add / Identify a Distress

Block cracking Moderate severity

	Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended	Asphalt Overlay/Mill+overlays	\$ 7.5 / yd ²	419	0.10
Acceptable	Crack Seal/FI	\$ 0.75 / linear ft	68	0.07

Use the Balpark Benefit/Cost Estimator for all treatments?

[View / Print / Save a PDF Report](#)

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by browsing the full list.

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxway, Apron

Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)
asphalt

DISTRESS #1

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High

DISTRESS #2

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Medium
A few longitudinal cracks, High
Many longitudinal cracks, Low
Many longitudinal cracks, Medium
Many longitudinal cracks, High

+ Add / Identify a Distress

Block cracking Moderate severity

	Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended	Asphalt Overlay/Mill+overlays	\$ 7.5 / yd ²	419	0.10
Acceptable	Crack Seal/FI	\$ 0.75 / linear ft	68	0.07

Use the Balpark Benefit/Cost Estimator for all treatments?

[View / Print / Save a PDF Report](#)

If the current feature is experiencing more than one distress, again click **Add/Identify a Distress** and follow the preceding steps to identify as many distresses as applicable.

Note that in most cases, a single treatments table will appear, combining the recommended and acceptable treatments for the distresses identified. Pictured is an instance where differing recommended treatments exist, so multiple tables are shown.

Determining and Evaluating Your Options

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#).

Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron

Runway

State (for climate determination)*
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)*
asphalt

DISTRESS #1

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High


Block cracking - Moderate severity

DISTRESS #2

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Medium
A few longitudinal cracks, High
Many longitudinal cracks, Low
Many longitudinal cracks, Medium
Many longitudinal cracks, High


Longitudinal cracking - High severity

+ Add / Identify a Distress

Block cracking Moderate severity

	Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended	Asphalt Overlay/Mill+overlay	\$ 7.5 / yd ²	419	0.10
Acceptable	Crack Seal/fill	\$ 0.75 / linear ft	68	0.07

Few longitudinal cracks or joints- High severity

	Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended	Patch/Reconstruct area	\$.50 / yd ²	248	0.03
Acceptable	Crack Seal/fill	\$ 1 / linear ft	197	1.31

Use the Ballpark Benefit/Cost Estimator for all treatments?
Please enter the length and width, in feet, of feature

length (feet) width (feet)

[View / Print / Save a PDF Report](#)

Click the **Use the Ballpark Benefit/Cost Estimator for all treatments?** checkbox to view and adjust cost estimates for treating the current feature.



Use the Ballpark Benefit/Cost Estimator for all treatments?

Please enter the length and width, in feet, of feature

length (feet) width (feet)

Determining and Evaluating Your Options

ACRP 09-11 Home Your Facility Appendix Clear

Your Facility

Determining and Evaluating Your Options

If you are not familiar with the names of pavement distresses, you may choose to start by [browsing the full list](#). Otherwise, please proceed below.

Feature Identifier (Optional)
For example, Runway, Taxiway, Apron
Runway

State (for climate determination)
Arizona Apache

FAA Airport Classification
Local

Pavement Type (asphalt or concrete)
asphalt

DISTRESS #1

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Surface Distress
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Block cracking Low
Block cracking Medium
Block cracking High

DISTRESS #2

1 Identify a Distress
Cracking
Longitudinal info
Transverse info
Alligator info
Block info
Edge info
Reflection info
Weathering info
Raveling info
Patching info
Roughness info

2 Select an Amount & Severity
Few longitudinal cracks, Low
Few longitudinal cracks, Moderate

Treatment	Cost Basis	Relative Benefit	(higher = better)
Recommended Asphalt Overlay/Mill+overlay	\$ 7.5 / yd ²	419	0.10
Acceptable Crack Seal/fill	\$ 1.50 / linear ft	68	0.07

Few longitudinal cracks or joints- High severity

Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended Asphalt Overlay/Mill+overlay	\$ 7.5 / yd ²	419	0.10
Acceptable Crack Seal/fill	\$ 1.50 / linear ft	68	0.07

Few longitudinal cracks or joints- High severity

Treatment	Cost Basis	Relative Benefit	Benefit/Cost (higher = better)
Recommended Patch/Reconstruct area	\$ 50 / yd ²	248	0.03
Acceptable Crack Seal/fill	\$ 1 / linear ft	197	1.31

Use the Ballpark Benefit/Cost Estimator for all treatments?
Please enter the length and width, in feet, of feature.

1000 50

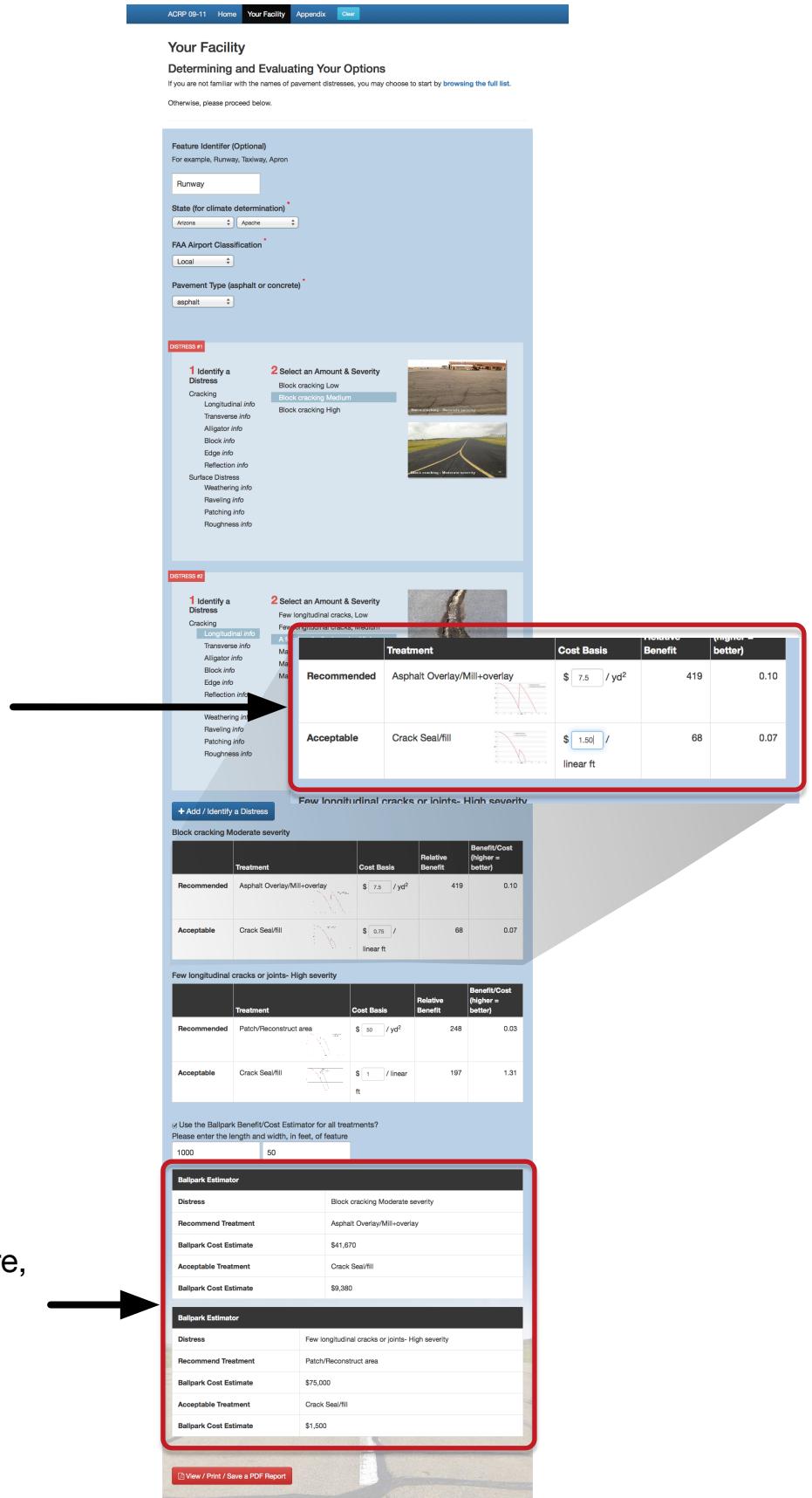
Ballpark Estimator

Distress	Block cracking Moderate severity
Recommend Treatment	Asphalt Overlay/Mill+overlay
Ballpark Cost Estimate	\$41,670
Acceptable Treatment	Crack Seal/fill
Ballpark Cost Estimate	\$9,380

Ballpark Estimator

Distress	Few longitudinal cracks or joints- High severity
Recommend Treatment	Patch/Reconstruct area
Ballpark Cost Estimate	\$75,000
Acceptable Treatment	Crack Seal/fill
Ballpark Cost Estimate	\$1,500

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These costs are based on the cost basis numbers for each treatment. You may adjust these costs as needed per treatment. Note that as you change cost basis numbers and tab to the next field, that the corresponding ballpark cost estimate will change as well.

When you enter a length and width for your feature, (a) Ballpark Estimator table(s) will appear with estimated costs.

Determining and Evaluating Your Options

To clear your feature inputs to start evaluating another feature, click **Clear**.

The screenshot shows the ACRP 09-11 software interface. At the top, there is a navigation bar with links for 'ACRP 09-11', 'Home', 'Your Facility', 'Appendix', and a 'Clear' button. An arrow points to the 'Clear' button, which is highlighted with a red circle. Below the navigation bar, the title 'Your Facility' and 'Determining and Evaluating Your Options' is displayed. A sub-instruction says: 'If you are not familiar with the names of pavement distresses, you may choose to start by browsing the full list. Otherwise, please proceed below.' The main content area is divided into two sections: 'DISTRESS #1' and 'DISTRESS #2'. Each section contains a list of distress types under '1 Identify a Distress' and a selection of severity levels under '2 Select an Amount & Severity'. To the right of each section is a small image illustrating the distress type. Below these sections is a table titled '+ Add / Identify a Distress' comparing treatment options for 'Block cracking Moderate severity'. The table has columns for Treatment, Cost Basis, Relative Benefit, and Benefit/Cost (higher = better). It lists 'Recommended' (Asphalt Overlay/Mill+overlay) and 'Acceptable' (Crack Seal/fill) treatments. Another table for 'Few longitudinal cracks or joints- High severity' is also shown. At the bottom, there is a 'Ballpark Estimator' section with tables for 'Distress' (Block cracking Moderate severity), 'Recommend Treatment' (Asphalt Overlay/Mill+overlay), 'Ballpark Cost Estimate' (\$41,670), 'Acceptable Treatment' (Crack Seal/fill), and 'Ballpark Cost Estimate' (\$18,760). A final section at the bottom is the 'Ballpark Estimator' for 'Few longitudinal cracks or joints- High severity' with similar treatment and cost information. A large red arrow points to the 'View / Print / Save a PDF Report' button at the very bottom of the page.