



Balanced Mix Design: Rutting Performance Tests

Mechanistic Analysis

Appendix F
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Credit: NAPA

Airport Asphalt Pavement Technology Program

PREPARED BY:

University of Nevada, Reno

Elie Y. Hajj

Nicole G. Elias (currently California State Polytechnic University, Pomona)

Bipin Khanal

Ashraf Alrajhi

Adam Hand

Rutgers University

Thomas Bennert

Texas A&M Transportation Institute

Fujie Zhou

Jon Epps

Kin Ming Chan

RDM International, Inc.

Christopher S. Decker

Harsh Patel

Duval Engineering LLC

John Duval



The [Airport Asphalt Pavement Technology Program](#) (AATP) is a cooperative agreement effort between the **National Asphalt Pavement Association** (NAPA) and the **Federal Aviation Administration** (FAA) to advance asphalt pavements and pavement materials. The AATP advances solutions for asphalt pavement design, construction, and materials deemed important to airfield reliability, efficiency, and safety. The program leverages NAPA's unique technology implementation capabilities with assistance from the FAA and industry to advance deployment and adoption of innovative asphalt material technologies.

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List of Acronyms and Abbreviations

AC	Asphalt concrete
APA	Asphalt Pavement Analyzer
AV	Air voids
BMD	Balanced Mix Design
CBR	California Bearing Ratio
σ_c	Confining stress
σ_d	Deviatoric stress
EWR	Newark Liberty International Airport
FAA	Federal Aviation Administration
FOS	Factor of safety
GAW	Gross aircraft weight
RTS	Reno Stead Airport
SFO	San Francisco International Airport
TEB	Teterboro Airport
VMA	Voids in mineral aggregates
VFA	Voids filled with asphalt

Executive Summary

This study aimed to establish representative rutting test protocols and criteria tailored for airfield asphalt mixtures, supporting the Federal Aviation Administration's (FAA's) Balanced Mix Design (BMD) efforts at both the mix design and production stages. Four rutting test methods were evaluated, emphasizing laboratory protocols that simulate field conditions by accounting for specimen preparation, air void (AV) levels, aging, conditioning, and test temperatures.

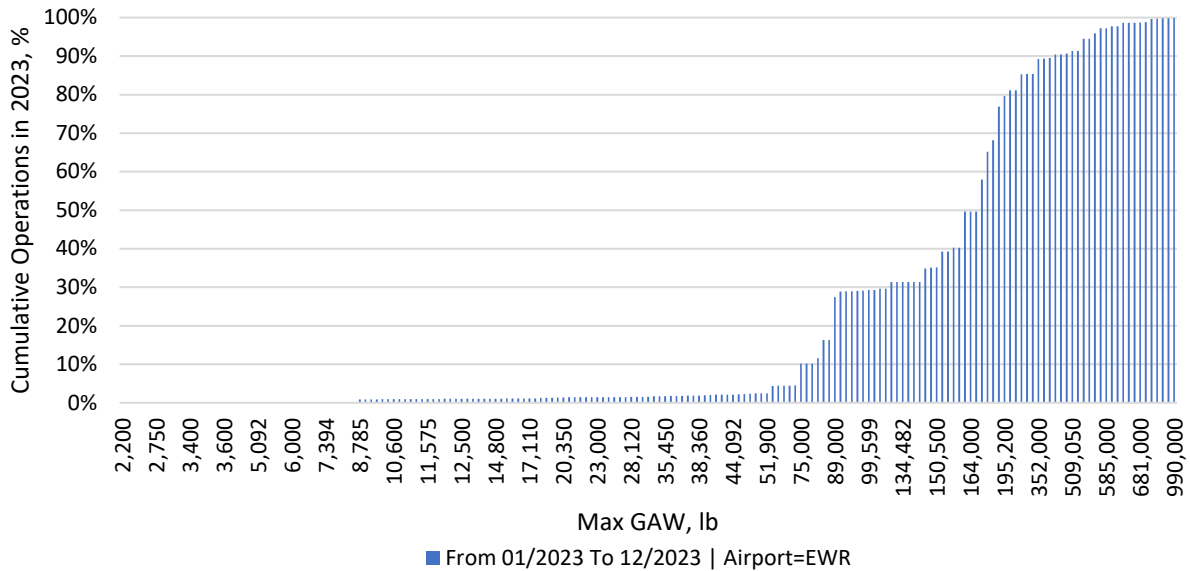
Experimental results revealed strong correlations between the rut depth from the Asphalt Pavement Analyzer (APA) (100 psi/100 lb and 250 psi/250 lb), the high temperature indirect tensile strength test, and the rutting tolerance index from the ideal rutting test. Enhanced correlations were observed using Hamburg wheel-tracking test rut depths at 5,000 passes rather than 20,000 passes.

An AV level of 7 ± 0.5 percent was recommended for all rutting tests to ensure consistent specimen preparation. A mechanistic-empirical approach was used to refine the FAA's APA 250 psi/250 lb rutting test criterion by incorporating aircraft speed and load. This framework used the 3D-Move Analysis software tool to model pavement responses under varying temperatures, speeds, and loads, generating stress states for realistic field simulations. The resulting rutting performance models quantified mixture sensitivity to operational conditions, leading to revised test criteria for slow or stationary aircraft and general airfield pavements.

Laboratory verification of the recommended criteria was conducted using field cores from airfield sections with known performance. Revised specifications for P-401/P-403 asphalt mixtures are proposed. To expand BMD implementation into production, pilot projects are recommended to validate the proposed protocols and identify practical challenges. Long-term monitoring of sampled pavement sections will further refine the correlations between laboratory criteria and in-service performance of airfield asphalt pavements.

Chapter 1. Air Traffic Mix

Newark Liberty International Airport (EWR)

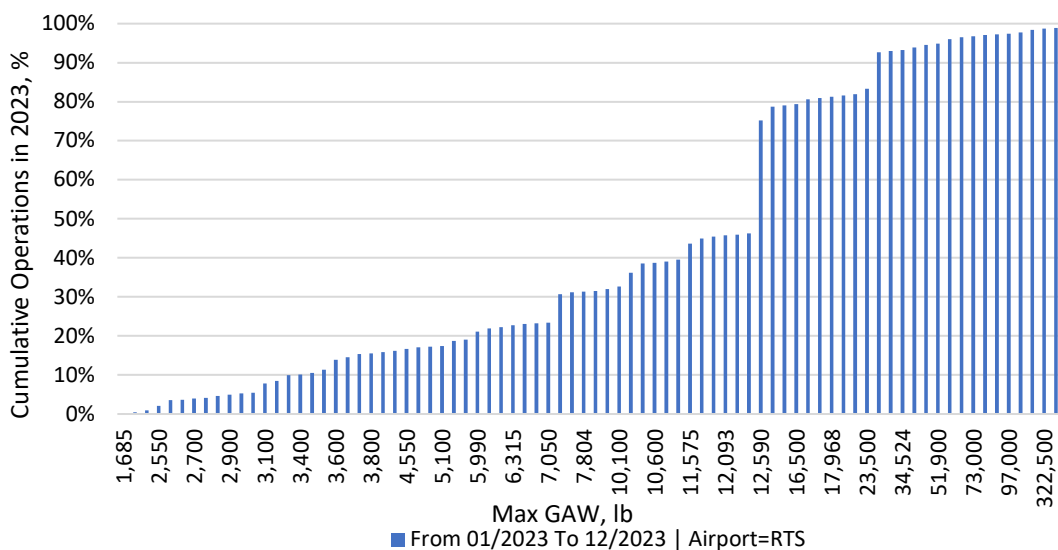


GAW = gross aircraft weight.

Source: University of Nevada, Reno

Figure 1. Cumulative Distribution of EWR Air Traffic Mix During 2023

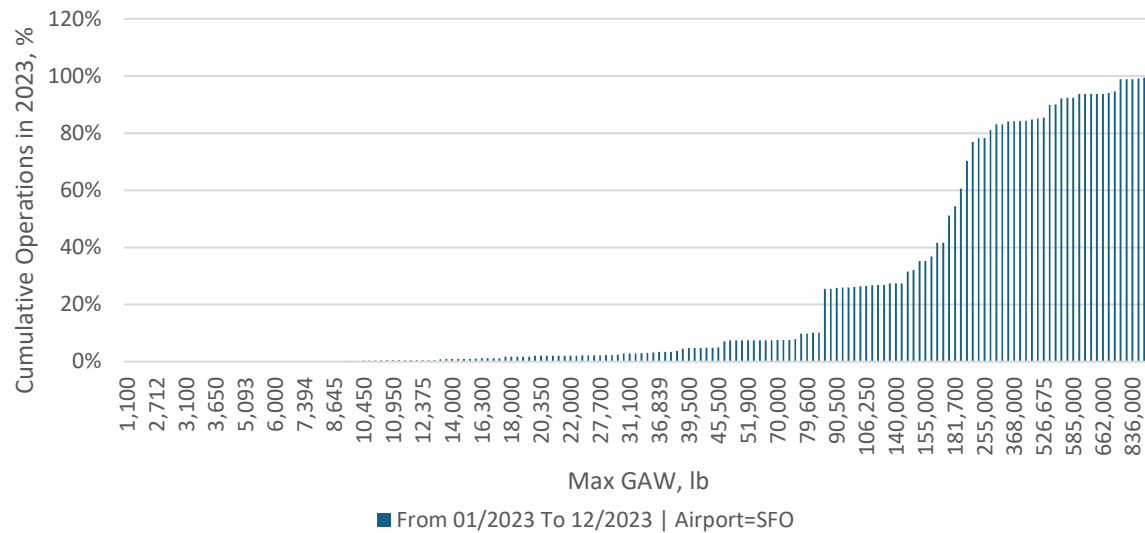
Reno Stead Airport (RTS)



Source: University of Nevada, Reno

Figure 2. Cumulative Distribution of RTS Air Traffic Mix During 2023

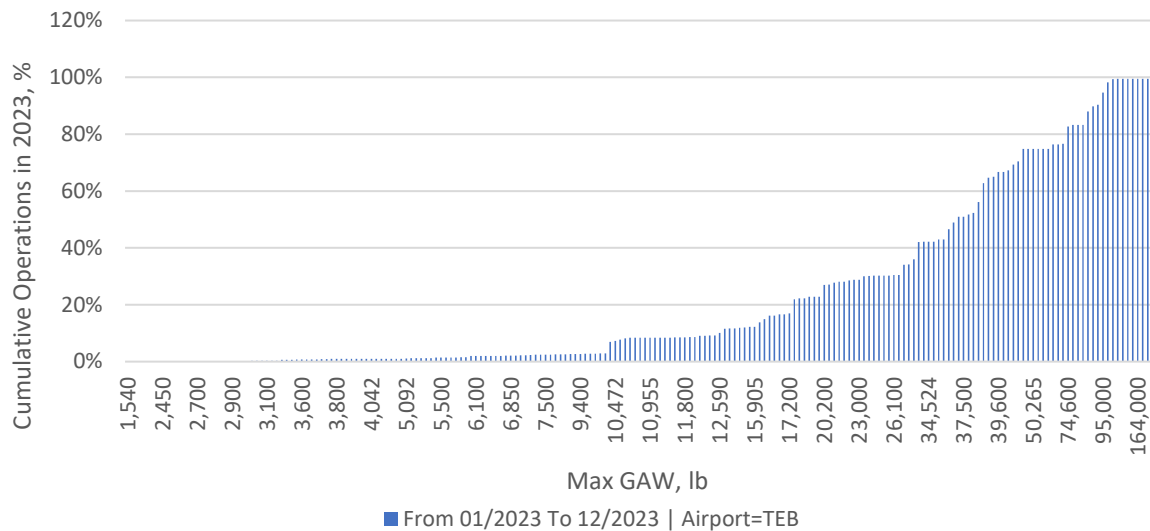
San Francisco International Airport (SFO)



Source: University of Nevada, Reno

Figure 3. Cumulative Distribution of SFO Air Traffic Mix During 2023

Teterboro Airport (TEB)



Source: University of Nevada, Reno

Figure 4. Cumulative Distribution of TEB Air Traffic Mix During 2023

Chapter 2. 3D-Move Analysis Input

Newark Liberty International Airport (EWR)

Table 1. 3D-Move Input Data for EWR Pavement

Input	Parameters	Values	Units
Pavement Structure	Layer 1: AC	8	inch
	Layer 2: AC Macadam	15	inch
	Layer 3: Base P-209	12	inch
	Layer 4: Subgrade	infinite	
Layer 1 AC (viscoelastic)	E* Data and Phase Angle	lab input	
	Reference Temperature	104	°F
	VMA	15.48	%
	VFA	69.5	%
	Analysis Temperature	125.6/136.4/147.2	°F
	Unit Weight	0.0892	lb/inch ³
	Poisson	0.35	
Layer 2 AC Macadam (elastic)	Elastic Modulus, E	100,000	psi
	Damping Ratio	5	%
	Poisson	0.35	
	Unit Weight	0.0868	lb/inch ³
Layer 3 Base P-209	CBR	80	
	Calculated E	42,205	psi
	Poisson	0.35	
	Damping Ratio	5	%
	Unit Weight	0.083912	lb/inch ³
Layer 4 Subgrade	CBR	7.8	
	Calculated E	9,513	psi
	Poisson	0.4	
	Damping Ratio	5	%
	Unit Weight	0.0567	lb/inch ³

AC = asphalt concrete; VMA = voids in mineral aggregates, VFA = voids filled with asphalt, CBR = California Bearing Ratio.

Reno Stead Airport (RTS)

Table 2. 3D-Move Input Data for RTS Pavement

Input	Parameters	Values	Units
Pavement Structure	Layer 1: AC	3.5	inch
	Layer 2: Base P-209	7	inch
	Layer 3: Subgrade	infinite	
Layer 1 AC (viscoelastic)	E* Data and Phase Angle	lab input	
	Reference Temperature	104	°F
	VMA	18.05	%
	VFA	69.92	%
	Analysis Temperature	125.6/136.4/147.2	°F
	Unit Weight	0.0860	lb/inch ³
	Poisson	0.35	
Layer 2 Base P-209	CBR	80	
	Calculated E	42,205	psi
	Poisson	0.35	
	Damping Ratio	5	%
	Unit Weight	0.083912	lb/inch ³
Layer 3 Subgrade	CBR	15.6	
	Calculated E	14,825	psi
	Poisson	0.4	
	Damping Ratio	5	%
	Unit Weight	0.0567	lb/inch ³

San Francisco International Airport (SFO)

Table 3. 3D-Move Input Data for SFO Pavement

Input	Parameters	Values	Units
Pavement Structure	Layer 1: AC	4	inch
	Layer 2: Existing AC (P-401/P-403)	17	inch
	Layer 3: Base P-209	6	inch
	Layer 4: Treated Subgrade (P-155/P-156 Blend)	12	inch
	Layer 5: Subgrade	infinite	
Layer 1 AC (viscoelastic)	E* Data and Phase Angle	lab input	
	Reference Temperature	104	°F
	VMA	15.36	%
	VFA	64.9	%
	Analysis Temperature	104/125.6/147.2	°F
	Unit Weight	0.0874	lb/inch ³
	Poisson	0.35	
Layer 2 Existing AC (elastic)	Elastic Modulus, E	400,000	psi
	Damping Ratio	5	%
	Poisson	0.35	
	Unit Weight	0.0868	lb/inch ³
Layer 3 Base P-209	CBR	80	
	Calculated E	42,205	psi
	Poisson	0.35	
	Damping Ratio	5	%
	Unit Weight	0.083912	lb/inch ³
Layer 4 Treated Subgrade (P-155/P-156)	CBR	20	
	Calculated E	17,380	psi
	Poisson	0.4	
	Damping Ratio	5	%
	Unit Weight	0.0567	lb/inch ³
Layer 5 Subgrade	CBR	2.5	
	Calculated E	4,593	psi
	Poisson	0.4	
	Damping Ratio	5	%
	Unit Weight	0.0567	lb/inch ³

Teterboro Airport (TEB)

Table 4. 3D-Move Input Data for TEB Pavement

Input	Parameters	Values	Units
Pavement Structure	Layer 1: AC	3	inch
	Layer 2: Existing AC	6.5	inch
	Layer 3: AC Macadam	4	inch
	Layer 4: Base P-209 DGABC	6	inch
	Layer 5: Subgrade	infinite	
Layer 1 AC (viscoelastic)	E* Data and Phase Angle	lab input	
	Reference Temperature	104	°F
	VMA	16.99	%
	VFA	68.42	%
	Analysis Temperature	125.6/136.4/147.2	°F
	Unit Weight	0.0854	lb/inch ³
	Poisson	0.35	
Layer 2 Existing AC (elastic)	Elastic Modulus, E	400,000	psi
	Damping Ratio	5	%
	Poisson	0.35	
	Unit Weight	0.0868	lb/inch ³
Layer 3 AC Macadam (elastic)	Elastic Modulus, E	100,000	psi
	Damping Ratio	5	%
	Poisson	0.35	
	Unit Weight	0.0868	lb/inch ³
	CBR	80	
Layer 4 Base P-209	Calculated E	42,205	psi
	Poisson	0.35	
	Damping Ratio	5	%
	Unit Weight	0.083912	lb/inch ³
	CBR	4	
Layer 5 Subgrade	Calculated E	6,205	psi
	Poisson	0.4	
	Damping Ratio	5	%
	Unit Weight	0.0567	lb/inch ³
	Layer 1: AC	3	inch

DGABC = dense-graded aggregate base course.

Chapter 3. 3D-Move Analysis Responses

Newark Liberty International Airport (EWR)

Beechcraft King Air B200 Aircraft

Table 5. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	Outer edge of tire	23.1	-12.2	-13.5	-4.5	23.1	7.1
	Center of tire	22.9	-12.9	-15.8	-5.3	22.9	7.1
	Inner edge of tire	20.6	20.6	82.5	27.5	20.6	9.0
	Center between both tires	12.8	-8.9	-13.7	-4.6	12.8	12.7
2 inches Below Surface	Outer edge of tire	50.3	8.4	75.5	25.2	50.3	3.6
	Center of tire	62.5	15.5	109.1	36.4	62.5	3.1
	Inner edge of tire	49.9	8.9	76.6	25.5	49.9	3.7
	Center between both tires	11.6	3.7	22.7	7.6	11.6	14.8
Mid AC Layer 1	Outer edge of tire	36.2	3.5	46.6	15.5	36.2	4.9
	Center of tire	44.8	5.2	60.3	20.1	44.8	4.0
	Inner edge of tire	34.1	5.3	50.0	16.7	34.1	5.2
	Center between both tires	12.6	6.3	31.6	10.5	12.6	13.8
Bottom AC Layer 1	Outer edge of tire	15.6	4.3	28.5	9.5	15.6	11.1
	Center of tire	15.5	4.6	29.2	9.7	15.5	11.1
	Inner edge of tire	13.7	4.4	26.8	8.9	13.7	12.6
	Center between both tires	10.9	4.3	23.7	7.9	10.9	15.8
2 inches Below Surface*	Center of tire*	62.5	15.5	109.1	36.4	62.5	3.1

σ_d = deviatoric stress; σ_c = confining stress; FOS = factor of safety.

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 6. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	22.6	-12.7	-15.4	-5.1	22.6	7.2
	<i>Center of tire</i>	23.2	-13.4	-17.1	-5.7	23.2	7.0
	<i>Inner edge of tire</i>	21.0	21.0	84.1	28.0	21.0	8.8
	<i>Center between both tires</i>	12.6	-9.8	-17.0	-5.7	12.6	12.9
2 inches Below Surface	<i>Outer edge of tire</i>	50.5	7.9	74.2	24.7	50.5	3.6
	<i>Center of tire</i>	63.4	15.5	109.7	36.6	63.4	3.0
	<i>Inner edge of tire</i>	50.5	8.3	75.4	25.1	50.5	3.6
	<i>Center between both tires</i>	11.4	3.3	21.2	7.1	11.4	15.0
Mid AC Layer 1	<i>Outer edge of tire</i>	36.4	3.4	46.6	15.5	36.4	4.9
	<i>Center of tire</i>	45.6	5.0	60.6	20.2	45.6	3.9
	<i>Inner edge of tire</i>	34.7	5.2	50.2	16.7	34.7	5.1
	<i>Center between both tires</i>	12.7	6.4	31.8	10.6	12.7	13.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	15.2	5.9	32.9	11.0	15.2	11.4
	<i>Center of tire</i>	14.9	5.5	31.2	10.4	14.9	11.7
	<i>Inner edge of tire</i>	13.3	5.2	28.8	9.6	13.3	13.0
	<i>Center between both tires</i>	11.0	4.4	24.0	8.0	11.0	15.6
2 inches Below Surface*	Center of tire*	63.4	15.5	109.7	36.6	63.4	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 7. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	22.3	-12.8	-16.1	-5.4	22.3	7.3
	<i>Center of tire</i>	23.2	-13.5	-17.5	-5.8	23.2	7.0
	<i>Inner edge of tire</i>	21.2	21.2	85.0	28.3	21.2	8.7
	<i>Center between both tires</i>	12.5	-10.4	-18.6	-6.2	12.5	13.0
2 inches Below Surface	<i>Outer edge of tire</i>	50.7	7.6	73.6	24.5	50.7	3.6
	<i>Center of tire</i>	63.9	15.6	110.8	36.9	63.9	3.0
	<i>Inner edge of tire</i>	50.8	8.0	74.7	24.9	50.8	3.6
	<i>Center between both tires</i>	11.4	3.0	20.5	6.8	11.4	15.0
Mid AC Layer 1	<i>Outer edge of tire</i>	36.5	3.4	46.7	15.6	36.5	4.8
	<i>Center of tire</i>	46.1	4.9	60.6	20.2	46.1	3.9
	<i>Inner edge of tire</i>	35.0	5.1	50.2	16.7	35.0	5.1
	<i>Center between both tires</i>	12.7	6.4	31.9	10.6	12.7	13.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	15.0	6.7	35.1	11.7	15.0	11.6
	<i>Center of tire</i>	14.6	6.3	33.7	11.2	14.6	11.9
	<i>Inner edge of tire</i>	13.2	5.5	29.7	9.9	13.2	13.1
	<i>Center between both tires</i>	10.9	4.2	23.5	7.8	10.9	15.8
2 inches Below Surface*	Center of tire*	63.9	15.6	110.8	36.9	63.9	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 8. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	23.5	-11.5	-10.9	-3.6	23.5	7.0
	<i>Center of tire</i>	22.5	-12.0	-13.5	-4.5	22.5	7.3
	<i>Inner edge of tire</i>	20.3	20.3	81.1	27.0	20.3	9.1
	<i>Center between both tires</i>	13.4	-7.7	-9.7	-3.2	13.4	12.2
2 inches Below Surface	<i>Outer edge of tire</i>	50.1	8.9	76.9	25.6	50.1	3.7
	<i>Center of tire</i>	61.5	15.6	108.4	36.1	61.5	3.1
	<i>Inner edge of tire</i>	49.1	9.8	78.4	26.1	49.1	3.7
	<i>Center between both tires</i>	11.9	4.3	24.6	8.2	11.9	14.5
Mid AC Layer 1	<i>Outer edge of tire</i>	36.0	3.5	46.4	15.5	36.0	4.9
	<i>Center of tire</i>	43.8	5.3	59.8	19.9	43.8	4.1
	<i>Inner edge of tire</i>	33.5	5.4	49.7	16.6	33.5	5.3
	<i>Center between both tires</i>	12.6	6.0	30.5	10.2	12.6	13.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	16.2	2.4	23.4	7.8	16.2	10.6
	<i>Center of tire</i>	16.6	2.8	24.9	8.3	16.6	10.4
	<i>Inner edge of tire</i>	14.6	3.2	24.2	8.1	14.6	11.8
	<i>Center between both tires</i>	11.2	3.0	20.3	6.8	11.2	15.2
2 inches Below Surface*	Center of tire*	61.5	15.6	108.4	36.1	61.5	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 9. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	23.0	-12.4	-14.1	-4.7	23.0	7.1
	<i>Center of tire</i>	23.0	-13.1	-16.3	-5.4	23.0	7.1
	<i>Inner edge of tire</i>	20.7	20.7	82.9	27.6	20.7	8.9
	<i>Center between both tires</i>	12.7	-9.1	-14.7	-4.9	12.7	12.8
2 inches Below Surface	<i>Outer edge of tire</i>	50.4	8.3	75.2	25.1	50.4	3.6
	<i>Center of tire</i>	62.8	15.3	108.7	36.2	62.8	3.0
	<i>Inner edge of tire</i>	50.0	8.7	76.2	25.4	50.0	3.7
	<i>Center between both tires</i>	11.5	3.6	22.3	7.4	11.5	14.9
Mid AC Layer 1	<i>Outer edge of tire</i>	36.2	3.4	46.6	15.5	36.2	4.9
	<i>Center of tire</i>	45.0	5.1	60.3	20.1	45.0	4.0
	<i>Inner edge of tire</i>	34.3	5.3	50.1	16.7	34.3	5.2
	<i>Center between both tires</i>	12.6	6.3	31.6	10.5	12.6	13.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	15.5	4.8	29.9	10.0	15.5	11.2
	<i>Center of tire</i>	15.3	4.9	30.0	10.0	15.3	11.3
	<i>Inner edge of tire</i>	13.6	4.6	27.3	9.1	13.6	12.7
	<i>Center between both tires</i>	10.9	4.3	23.9	8.0	10.9	15.7
2 inches Below Surface*	Center of tire*	62.8	15.3	108.7	36.2	62.8	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 10. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	22.6	-12.7	-15.5	-5.2	22.6	7.2
	<i>Center of tire</i>	23.2	-13.5	-17.3	-5.8	23.2	7.0
	<i>Inner edge of tire</i>	21.1	21.1	84.3	28.1	21.1	8.8
	<i>Center between both tires</i>	12.6	-10.0	-17.4	-5.8	12.6	12.9
2 inches Below Surface	<i>Outer edge of tire</i>	50.6	7.8	74.1	24.7	50.6	3.6
	<i>Center of tire</i>	63.5	15.4	109.6	36.5	63.5	3.0
	<i>Inner edge of tire</i>	50.6	8.2	75.3	25.1	50.6	3.6
	<i>Center between both tires</i>	11.4	3.2	21.0	7.0	11.4	15.0
Mid AC Layer 1	<i>Outer edge of tire</i>	36.4	3.4	46.7	15.6	36.4	4.9
	<i>Center of tire</i>	45.7	5.0	60.6	20.2	45.7	3.9
	<i>Inner edge of tire</i>	34.8	5.1	50.2	16.7	34.8	5.1
	<i>Center between both tires</i>	12.7	6.4	31.9	10.6	12.7	13.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	15.2	5.9	33.0	11.0	15.2	11.5
	<i>Center of tire</i>	14.8	5.8	32.1	10.7	14.8	11.7
	<i>Inner edge of tire</i>	13.3	5.1	28.6	9.5	13.3	13.0
	<i>Center between both tires</i>	11.0	4.3	23.8	7.9	11.0	15.7
2 inches Below Surface*	Center of tire*	63.5	15.4	109.6	36.5	63.5	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 11. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	24.0	-10.3	-6.7	-2.2	24.0	6.9
	<i>Center of tire</i>	21.9	-10.5	-9.6	-3.2	21.9	7.5
	<i>Inner edge of tire</i>	20.1	20.1	80.3	26.8	20.1	9.2
	<i>Center between both tires</i>	14.7	-6.3	-4.2	-1.4	14.7	11.2
2 inches Below Surface	<i>Outer edge of tire</i>	49.9	9.8	79.1	26.4	49.9	3.7
	<i>Center of tire</i>	60.1	16.0	108.2	36.1	60.1	3.2
	<i>Inner edge of tire</i>	48.1	10.8	80.5	26.8	48.1	3.8
	<i>Center between both tires</i>	12.5	4.9	27.2	9.1	12.5	13.8
Mid AC Layer 1	<i>Outer edge of tire</i>	35.9	3.4	46.1	15.4	35.9	4.9
	<i>Center of tire</i>	42.7	5.6	59.4	19.8	42.7	4.2
	<i>Inner edge of tire</i>	32.7	5.5	49.2	16.4	32.7	5.4
	<i>Center between both tires</i>	13.0	5.2	28.6	9.5	13.0	13.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	17.3	-0.2	16.9	5.6	17.3	9.8
	<i>Center of tire</i>	18.5	-0.3	17.6	5.9	18.5	9.2
	<i>Inner edge of tire</i>	16.3	0.8	18.6	6.2	16.3	10.5
	<i>Center between both tires</i>	12.7	1.7	17.9	6.0	12.7	13.4
2 inches Below Surface*	Center of tire*	60.1	16.0	108.2	36.1	60.1	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 12. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 45 mph and 58° C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	23.4	-11.7	-11.7	-3.9	23.4	7.0
	<i>Center of tire</i>	22.7	-12.3	-14.3	-4.8	22.7	7.2
	<i>Inner edge of tire</i>	20.4	20.4	81.6	27.2	20.4	9.1
	<i>Center between both tires</i>	13.2	-8.1	-11.0	-3.7	13.2	12.4
2 inches Below Surface	<i>Outer edge of tire</i>	50.2	8.8	76.5	25.5	50.2	3.7
	<i>Center of tire</i>	61.8	15.4	108.0	36.0	61.8	3.1
	<i>Inner edge of tire</i>	49.4	9.5	77.9	26.0	49.4	3.7
	<i>Center between both tires</i>	11.8	4.1	24.1	8.0	11.8	14.6
Mid AC Layer 1	<i>Outer edge of tire</i>	36.1	3.5	46.6	15.5	36.1	4.9
	<i>Center of tire</i>	44.2	5.3	60.2	20.1	44.2	4.1
	<i>Inner edge of tire</i>	33.7	5.4	49.9	16.6	33.7	5.3
	<i>Center between both tires</i>	12.6	6.1	30.9	10.3	12.6	13.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	16.0	3.1	25.4	8.5	16.0	10.7
	<i>Center of tire</i>	16.2	3.4	26.5	8.8	16.2	10.6
	<i>Inner edge of tire</i>	14.2	3.7	25.5	8.5	14.2	12.1
	<i>Center between both tires</i>	11.0	3.1	20.4	6.8	11.0	15.5
2 inches Below Surface*	Center of tire*	61.8	15.4	108.0	36.0	61.8	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 13. 3D-Move Responses for EWR Pavement Under Beechcraft King Air B200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	22.9	-12.4	-14.4	-4.8	22.9	7.1
	<i>Center of tire</i>	23.1	-13.2	-16.5	-5.5	23.1	7.0
	<i>Inner edge of tire</i>	20.8	20.8	83.3	27.8	20.8	8.9
	<i>Center between both tires</i>	12.7	-9.3	-15.3	-5.1	12.7	12.8
2 inches Below Surface	<i>Outer edge of tire</i>	50.5	8.2	75.0	25.0	50.5	3.6
	<i>Center of tire</i>	63.0	15.2	108.6	36.2	63.0	3.0
	<i>Inner edge of tire</i>	50.2	8.6	76.0	25.3	50.2	3.7
	<i>Center between both tires</i>	11.5	3.5	22.0	7.3	11.5	14.9
Mid AC Layer 1	<i>Outer edge of tire</i>	36.3	3.5	46.7	15.6	36.3	4.9
	<i>Center of tire</i>	45.2	5.1	60.5	20.2	45.2	4.0
	<i>Inner edge of tire</i>	34.5	5.2	50.2	16.7	34.5	5.2
	<i>Center between both tires</i>	12.6	6.4	31.8	10.6	12.6	13.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	15.4	5.0	30.4	10.1	15.4	11.2
	<i>Center of tire</i>	15.2	5.1	30.3	10.1	15.2	11.4
	<i>Inner edge of tire</i>	13.5	4.7	27.5	9.2	13.5	12.8
	<i>Center between both tires</i>	11.0	4.2	23.7	7.9	11.0	15.6
2 inches Below Surface*	Center of tire*	63.0	15.2	108.6	36.2	63.0	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Bombardier CRJ 200 Aircraft

Table 14. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.3	-22.3	-28.7	-9.6	38.3	4.2
	<i>Center of tire</i>	37.7	-23.6	-33.2	-11.1	37.7	4.2
	<i>Inner edge of tire</i>	33.6	33.6	134.3	44.8	33.6	5.9
	<i>Center between both tires</i>	17.2	-11.5	-17.4	-5.8	17.2	9.4
2 inches Below Surface	<i>Outer edge of tire</i>	84.7	20.9	147.3	49.1	84.7	2.4
	<i>Center of tire</i>	102.6	27.1	183.9	61.3	102.6	2.0
	<i>Inner edge of tire</i>	83.8	21.3	147.8	49.3	83.8	2.4
	<i>Center between both tires</i>	15.9	4.5	29.5	9.8	15.9	10.9
Mid AC Layer 1	<i>Outer edge of tire</i>	72.8	13.4	112.9	37.6	72.8	2.6
	<i>Center of tire</i>	96.4	21.2	160.2	53.4	96.4	2.1
	<i>Inner edge of tire</i>	69.0	15.9	116.6	38.9	69.0	2.8
	<i>Center between both tires</i>	23.2	8.6	49.0	16.3	23.2	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	43.0	12.6	80.8	26.9	43.0	4.3
	<i>Center of tire</i>	42.6	13.2	82.1	27.4	42.6	4.3
	<i>Inner edge of tire</i>	35.6	13.9	77.1	25.7	35.6	5.2
	<i>Center between both tires</i>	19.9	3.5	30.6	10.2	19.9	8.7
2 inches Below Surface*	Center of tire*	102.6	27.1	183.9	61.3	102.6	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 15. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	37.2	-23.2	-32.5	-10.8	37.2	4.3
	<i>Center of tire</i>	37.5	-24.1	-34.8	-11.6	37.5	4.2
	<i>Inner edge of tire</i>	34.1	34.1	136.4	45.5	34.1	5.8
	<i>Center Between Both tires</i>	15.2	-13.1	-24.1	-8.0	15.2	10.6
2 inches Below Surface	<i>Outer edge of tire</i>	85.0	20.0	144.9	48.3	85.0	2.3
	<i>Center of tire</i>	104.1	29.2	191.8	63.9	104.1	2.0
	<i>Inner edge of tire</i>	84.5	20.3	145.3	48.4	84.5	2.4
	<i>Center Between Both tires</i>	15.2	3.3	25.2	8.4	15.2	11.3
Mid AC Layer 1	<i>Outer edge of tire</i>	72.7	13.3	112.7	37.6	72.7	2.6
	<i>Center of tire</i>	98.8	21.2	162.5	54.2	98.8	2.1
	<i>Inner edge of tire</i>	69.4	15.6	116.2	38.7	69.4	2.8
	<i>Center Between both tires</i>	23.1	8.0	47.1	15.7	23.1	7.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	42.5	16.4	91.7	30.6	42.5	4.4
	<i>Center of tire</i>	40.7	15.0	85.6	28.5	40.7	4.6
	<i>Inner edge of tire</i>	35.3	15.6	82.1	27.4	35.3	5.2
	<i>Center between both tires</i>	18.5	3.4	28.7	9.6	18.5	9.3
2 inches Below Surface*	Center of tire*	104.1	29.2	191.8	63.9	104.1	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 16. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	36.2	-23.3	-33.7	-11.2	36.2	4.4
	<i>Center of tire</i>	37.0	-23.8	-34.4	-11.5	37.0	4.3
	<i>Inner edge of tire</i>	34.3	34.3	137.3	45.8	34.3	5.7
	<i>Center between both tires</i>	14.5	-13.9	-27.3	-9.1	14.5	11.1
2 inches Below Surface	<i>Outer edge of tire</i>	85.2	19.5	143.8	47.9	85.2	2.3
	<i>Center of tire</i>	104.0	28.8	190.5	63.5	104.0	2.0
	<i>Inner edge of tire</i>	84.9	19.8	144.3	48.1	84.9	2.3
	<i>Center between both tires</i>	14.9	2.7	22.9	7.6	14.9	11.5
Mid AC Layer 1	<i>Outer edge of tire</i>	72.7	13.3	112.5	37.5	72.7	2.6
	<i>Center of tire</i>	100.2	21.0	163.1	54.4	100.2	2.0
	<i>Inner edge of tire</i>	69.7	15.3	115.7	38.6	69.7	2.8
	<i>Center between both tires</i>	23.1	7.6	45.9	15.3	23.1	7.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	42.4	18.9	99.2	33.1	42.4	4.4
	<i>Center of tire</i>	40.1	16.8	90.5	30.2	40.1	4.7
	<i>Inner edge of tire</i>	35.6	17.4	87.9	29.3	35.6	5.2
	<i>Center between both tires</i>	17.3	3.5	27.7	9.2	17.3	10.0
2 inches Below Surface*	Center of tire*	104.0	28.8	190.5	63.5	104.0	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 17. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.5	-20.6	-22.5	-7.5	39.5	4.1
	<i>Center of tire</i>	37.3	-22.1	-28.9	-9.6	37.3	4.3
	<i>Inner edge of tire</i>	33.0	33.0	131.9	44.0	33.0	6.0
	<i>Center between both tires</i>	20.5	-10.0	-9.5	-3.2	20.5	8.0
2 inches Below Surface	<i>Outer edge of tire</i>	84.7	22.4	152.0	50.7	84.7	2.4
	<i>Center of tire</i>	101.9	28.7	187.9	62.6	101.9	2.1
	<i>Inner edge of tire</i>	83.2	22.5	150.7	50.2	83.2	2.4
	<i>Center between both tires</i>	17.2	5.8	34.5	11.5	17.2	10.1
Mid AC Layer 1	<i>Outer edge of tire</i>	73.1	13.3	113.0	37.7	73.1	2.6
	<i>Center of tire</i>	93.7	20.9	156.5	52.2	93.7	2.2
	<i>Inner edge of tire</i>	68.7	16.0	116.8	38.9	68.7	2.8
	<i>Center between both tires</i>	23.5	9.2	51.2	17.1	23.5	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	43.9	8.6	69.7	23.2	43.9	4.1
	<i>Center of tire</i>	45.5	9.5	74.0	24.7	45.5	4.0
	<i>Inner edge of tire</i>	36.5	10.4	67.7	22.6	36.5	5.0
	<i>Center between both tires</i>	20.9	3.8	32.2	10.7	20.9	8.3
2 inches Below Surface*	Center of tire*	101.9	28.7	187.9	62.6	101.9	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 18. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.0	-22.7	-30.0	-10.0	38.0	4.2
	<i>Center of tire</i>	37.7	-23.9	-33.9	-11.3	37.7	4.2
	<i>Inner edge of tire</i>	33.7	33.7	134.9	45.0	33.7	5.8
	<i>Center between both tires</i>	16.5	-12.1	-19.7	-6.6	16.5	9.8
2 inches Below Surface	<i>Outer edge of tire</i>	84.9	20.9	147.6	49.2	84.9	2.4
	<i>Center of tire</i>	102.7	26.7	183.0	61.0	102.7	2.0
	<i>Inner edge of tire</i>	84.0	20.9	146.6	48.9	84.0	2.4
	<i>Center between both tires</i>	15.7	4.1	28.1	9.4	15.7	11.0
Mid AC Layer 1	<i>Outer edge of tire</i>	72.7	13.4	112.9	37.6	72.7	2.6
	<i>Center of tire</i>	97.0	21.1	160.2	53.4	97.0	2.1
	<i>Inner edge of tire</i>	69.1	15.8	116.5	38.8	69.1	2.8
	<i>Center between both tires</i>	23.2	8.5	48.7	16.2	23.2	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	42.8	13.7	84.0	28.0	42.8	4.3
	<i>Center of tire</i>	42.0	13.6	82.8	27.6	42.0	4.4
	<i>Inner edge of tire</i>	35.4	14.1	77.7	25.9	35.4	5.2
	<i>Center between both tires</i>	19.6	3.7	30.6	10.2	19.6	8.8
2 inches Below Surface*	Center of tire*	102.7	26.7	183.0	61.0	102.7	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 19. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	37.0	-23.3	-32.9	-11.0	37.0	4.3
	<i>Center of tire</i>	37.4	-24.1	-34.8	-11.6	37.4	4.2
	<i>Inner edge of tire</i>	34.2	34.2	136.7	45.6	34.2	5.8
	<i>Center between both tires</i>	15.0	-13.3	-25.0	-8.3	15.0	10.8
2 inches Below Surface	<i>Outer edge of tire</i>	85.0	19.8	144.4	48.1	85.0	2.3
	<i>Center of tire</i>	104.1	29.1	191.4	63.8	104.1	2.0
	<i>Inner edge of tire</i>	84.5	20.1	144.8	48.3	84.5	2.4
	<i>Center between both tires</i>	15.1	3.2	24.6	8.2	15.1	11.4
Mid AC Layer 1	<i>Outer edge of tire</i>	72.7	13.4	112.8	37.6	72.7	2.6
	<i>Center of tire</i>	99.2	21.1	162.5	54.2	99.2	2.0
	<i>Inner edge of tire</i>	69.5	15.5	116.1	38.7	69.5	2.8
	<i>Center between both tires</i>	23.1	7.9	46.9	15.6	23.1	7.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	42.5	16.9	93.3	31.1	42.5	4.4
	<i>Center of tire</i>	40.6	15.7	87.8	29.3	40.6	4.6
	<i>Inner edge of tire</i>	35.4	16.1	83.6	27.9	35.4	5.2
	<i>Center between both tires</i>	18.3	3.7	29.5	9.8	18.3	9.5
2 inches Below Surface*	Center of tire*	104.1	29.1	191.4	63.8	104.1	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 20. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.2	-17.7	-12.0	-4.0	41.2	4.0
	<i>Center of tire</i>	36.5	-19.0	-20.5	-6.8	36.5	4.4
	<i>Inner edge of tire</i>	36.0	36.0	143.9	48.0	36.0	5.5
	<i>Center between both tires</i>	26.0	-7.9	2.2	0.7	26.0	6.4
2 inches Below Surface	<i>Outer edge of tire</i>	84.8	24.6	158.7	52.9	84.8	2.4
	<i>Center of tire</i>	99.4	27.5	181.9	60.6	99.4	2.1
	<i>Inner edge of tire</i>	82.4	24.4	155.6	51.9	82.4	2.4
	<i>Center between both tires</i>	19.6	7.5	42.0	14.0	19.6	9.0
Mid AC Layer 1	<i>Outer edge of tire</i>	73.7	13.1	113.2	37.7	73.7	2.6
	<i>Center of tire</i>	90.6	20.4	151.7	50.6	90.6	2.2
	<i>Inner edge of tire</i>	68.4	16.2	116.9	39.0	68.4	2.8
	<i>Center between both tires</i>	24.0	9.5	52.6	17.5	24.0	7.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	45.8	2.1	52.1	17.4	45.8	3.9
	<i>Center of tire</i>	50.5	2.2	57.0	19.0	50.5	3.6
	<i>Inner edge of tire</i>	38.9	5.4	55.0	18.3	38.9	4.6
	<i>Center between both tires</i>	22.0	4.3	35.0	11.7	22.0	7.9
2 inches Below Surface*	Center of tire*	99.4	27.5	181.9	60.6	99.4	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 21. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.1	-21.2	-24.5	-8.2	39.1	4.1
	<i>Center of tire</i>	37.5	-22.7	-30.5	-10.2	37.5	4.3
	<i>Inner edge of tire</i>	33.2	33.2	132.7	44.2	33.2	5.9
	<i>Center between both tires</i>	19.4	-10.5	-12.0	-4.0	19.4	8.4
2 inches Below Surface	<i>Outer edge of tire</i>	84.7	22.0	150.6	50.2	84.7	2.4
	<i>Center of tire</i>	102.2	28.2	186.7	62.2	102.2	2.0
	<i>Inner edge of tire</i>	83.3	22.0	149.3	49.8	83.3	2.4
	<i>Center between both tires</i>	16.8	5.4	33.0	11.0	16.8	10.4
Mid AC Layer 1	<i>Outer edge of tire</i>	73.0	13.4	113.3	37.8	73.0	2.6
	<i>Center of tire</i>	94.8	21.3	158.7	52.9	94.8	2.1
	<i>Inner edge of tire</i>	68.8	16.0	116.8	38.9	68.8	2.8
	<i>Center between both tires</i>	23.4	9.1	50.6	16.9	23.4	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	43.6	10.2	74.3	24.8	43.6	4.2
	<i>Center of tire</i>	44.4	11.0	77.3	25.8	44.4	4.1
	<i>Inner edge of tire</i>	36.0	11.3	69.9	23.3	36.0	5.1
	<i>Center between both tires</i>	20.8	3.7	31.7	10.6	20.8	8.4
2 inches Below Surface*	Center of tire*	102.2	28.2	186.7	62.2	102.2	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 22. 3D-Move Responses for EWR Pavement Under Bombardier CRJ 200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	37.8	-22.8	-30.6	-10.2	37.8	4.2
	<i>Center of tire</i>	37.7	-24.0	-34.3	-11.4	37.7	4.2
	<i>Inner edge of tire</i>	33.9	33.9	135.5	45.2	33.9	5.8
	<i>Center between both tires</i>	16.1	-12.3	-20.9	-7.0	16.1	10.0
2 inches Below Surface	<i>Outer edge of tire</i>	84.9	20.7	147.0	49.0	84.9	2.4
	<i>Center of tire</i>	102.9	26.6	182.7	60.9	102.9	2.0
	<i>Inner edge of tire</i>	84.1	20.6	146.0	48.7	84.1	2.4
	<i>Center between both tires</i>	15.6	4.0	27.4	9.1	15.6	11.1
Mid AC Layer 1	<i>Outer edge of tire</i>	72.8	13.4	113.1	37.7	72.8	2.6
	<i>Center of tire</i>	97.7	21.4	161.8	53.9	97.7	2.1
	<i>Inner edge of tire</i>	69.2	15.8	116.6	38.9	69.2	2.8
	<i>Center between both tires</i>	23.2	8.4	48.4	16.1	23.2	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	42.8	14.6	86.5	28.8	42.8	4.3
	<i>Center of tire</i>	41.7	14.7	86.0	28.7	41.7	4.5
	<i>Inner edge of tire</i>	35.4	14.8	79.9	26.6	35.4	5.2
	<i>Center between both tires</i>	19.4	3.5	29.8	9.9	19.4	8.9
2 inches Below Surface*	Center of tire*	102.9	26.6	182.7	60.9	102.9	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Gulfstream G600 Aircraft

Table 23. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.7	-26.0	-32.5	-10.8	45.7	3.5
	<i>Center of tire</i>	43.7	-30.2	-46.9	-15.6	43.7	3.6
	<i>Inner edge of tire</i>	37.7	37.7	150.9	50.3	37.7	5.3
	<i>Center between both tires</i>	26.1	-13.4	-13.9	-4.6	26.1	6.3
2 inches Below Surface	<i>Outer edge of tire</i>	96.1	28.7	182.3	60.8	96.1	2.2
	<i>Center of tire</i>	120.0	39.1	237.3	79.1	120.0	1.8
	<i>Inner edge of tire</i>	94.4	29.6	183.2	61.1	94.4	2.2
	<i>Center between both tires</i>	28.0	8.5	53.6	17.9	28.0	6.4
Mid AC Layer 1	<i>Outer edge of tire</i>	89.0	23.9	160.6	53.5	89.0	2.3
	<i>Center of tire</i>	118.1	35.1	223.5	74.5	118.1	1.8
	<i>Inner edge of tire</i>	81.4	29.0	168.5	56.2	81.4	2.5
	<i>Center between both tires</i>	36.9	16.3	85.8	28.6	36.9	5.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	66.4	20.8	128.7	42.9	66.4	2.9
	<i>Center of tire</i>	64.1	19.5	122.8	40.9	64.1	3.0
	<i>Inner edge of tire</i>	52.1	23.9	123.7	41.2	52.1	3.7
	<i>Center between both tires</i>	33.2	6.0	51.1	17.0	33.2	5.4
2 inches Below Surface*	Center of tire*	120.0	39.1	237.3	79.1	120.0	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 24. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.3	-26.8	-37.1	-12.4	43.3	3.6
	<i>Center of tire</i>	42.5	-29.9	-47.2	-15.7	42.5	3.7
	<i>Inner edge of tire</i>	38.5	38.5	153.9	51.3	38.5	5.2
	<i>Center between both tires</i>	22.2	-17.0	-28.9	-9.6	22.2	7.2
2 inches Below Surface	<i>Outer edge of tire</i>	96.2	27.7	179.4	59.8	96.2	2.2
	<i>Center of tire</i>	119.8	37.8	233.2	77.7	119.8	1.8
	<i>Inner edge of tire</i>	95.1	28.4	180.5	60.2	95.1	2.2
	<i>Center between both tires</i>	26.4	6.6	46.1	15.4	26.4	6.7
Mid AC Layer 1	<i>Outer edge of tire</i>	88.0	23.7	159.3	53.1	88.0	2.3
	<i>Center of tire</i>	121.7	37.8	235.1	78.4	121.7	1.8
	<i>Inner edge of tire</i>	81.5	28.4	166.7	55.6	81.5	2.5
	<i>Center between both tires</i>	36.4	15.2	82.0	27.3	36.4	5.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	66.1	25.4	142.4	47.5	66.1	3.0
	<i>Center of tire</i>	61.6	22.0	127.6	42.5	61.6	3.2
	<i>Inner edge of tire</i>	52.5	23.9	124.2	41.4	52.5	3.7
	<i>Center between both tires</i>	30.5	5.3	46.5	15.5	30.5	5.8
2 inches Below Surface*	Center of tire*	119.8	37.8	233.2	77.7	119.8	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 25. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.6	-26.6	-38.2	-12.7	41.6	3.8
	<i>Center of tire</i>	41.3	-28.9	-45.5	-15.2	41.3	3.8
	<i>Inner edge of tire</i>	38.7	38.7	154.9	51.6	38.7	5.2
	<i>Center between both tires</i>	21.1	-19.3	-36.9	-12.3	21.1	7.5
2 inches Below Surface	<i>Outer edge of tire</i>	96.3	26.7	176.4	58.8	96.3	2.1
	<i>Center of tire</i>	119.2	37.5	231.6	77.2	119.2	1.8
	<i>Inner edge of tire</i>	95.4	27.2	177.1	59.0	95.4	2.2
	<i>Center between both tires</i>	25.7	5.3	41.7	13.9	25.7	6.9
Mid AC Layer 1	<i>Outer edge of tire</i>	87.7	23.5	158.1	52.7	87.7	2.3
	<i>Center of tire</i>	123.7	38.9	240.3	80.1	123.7	1.8
	<i>Inner edge of tire</i>	81.7	27.9	165.5	55.2	81.7	2.5
	<i>Center between both tires</i>	36.1	14.5	79.7	26.6	36.1	5.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	65.9	27.4	148.0	49.3	65.9	3.0
	<i>Center of tire</i>	60.7	23.7	131.7	43.9	60.7	3.2
	<i>Inner edge of tire</i>	52.7	25.7	129.8	43.3	52.7	3.7
	<i>Center between both tires</i>	28.4	5.7	45.5	15.2	28.4	6.2
Mid AC Layer 1*	Center of tire*	123.7	38.9	240.3	80.1	123.7	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 26. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	47.2	-28.7	-39.0	-13.0	47.2	3.3
	<i>Center of tire</i>	44.0	-28.8	-42.5	-14.2	44.0	3.6
	<i>Inner edge of tire</i>	40.1	40.1	160.5	53.5	40.1	5.0
	<i>Center between both tires</i>	32.1	-10.9	-0.5	-0.2	32.1	5.2
2 inches Below Surface	<i>Outer edge of tire</i>	96.7	31.0	189.8	63.3	96.7	2.2
	<i>Center of tire</i>	117.4	35.4	223.7	74.6	117.4	1.8
	<i>Inner edge of tire</i>	93.7	31.0	186.8	62.3	93.7	2.2
	<i>Center between both tires</i>	30.6	10.8	62.9	21.0	30.6	5.9
Mid AC Layer 1	<i>Outer edge of tire</i>	90.5	23.9	162.1	54.0	90.5	2.2
	<i>Center of tire</i>	115.6	34.7	219.7	73.2	115.6	1.9
	<i>Inner edge of tire</i>	81.5	29.0	168.5	56.2	81.5	2.5
	<i>Center between both tires</i>	37.7	17.1	89.0	29.7	37.7	4.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	67.0	14.8	111.2	37.1	67.0	2.9
	<i>Center of tire</i>	68.0	14.9	112.7	37.6	68.0	2.8
	<i>Inner edge of tire</i>	51.0	17.7	104.3	34.8	51.0	3.7
	<i>Center between both tires</i>	35.4	6.6	55.1	18.4	35.4	5.1
2 inches Below Surface*	Center of tire*	117.4	35.4	223.7	74.6	117.4	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 27. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.1	-26.4	-34.1	-11.4	45.1	3.5
	<i>Center of tire</i>	43.5	-30.3	-47.4	-15.8	43.5	3.6
	<i>Inner edge of tire</i>	38.0	38.0	151.9	50.6	38.0	5.3
	<i>Center between both tires</i>	24.8	-14.3	-18.2	-6.1	24.8	6.5
2 inches Below Surface	<i>Outer edge of tire</i>	96.0	28.2	180.6	60.2	96.0	2.2
	<i>Center of tire</i>	120.0	38.7	236.0	78.7	120.0	1.8
	<i>Inner edge of tire</i>	94.5	29.0	181.3	60.4	94.5	2.2
	<i>Center between both tires</i>	27.5	8.0	51.4	17.1	27.5	6.5
Mid AC Layer 1	<i>Outer edge of tire</i>	88.7	23.9	160.3	53.4	88.7	2.3
	<i>Center of tire</i>	119.3	36.3	228.1	76.0	119.3	1.8
	<i>Inner edge of tire</i>	81.3	28.8	167.8	55.9	81.3	2.5
	<i>Center between both tires</i>	36.7	16.0	84.6	28.2	36.7	5.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	66.2	22.0	132.3	44.1	66.2	3.0
	<i>Center of tire</i>	63.1	19.4	121.4	40.5	63.1	3.1
	<i>Inner edge of tire</i>	52.3	23.6	123.0	41.0	52.3	3.7
	<i>Center between both tires</i>	32.5	5.5	49.0	16.3	32.5	5.5
Mid AC Layer 1*	Center of tire*	119.3	36.3	228.1	76.0	119.3	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 28. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	42.9	-26.8	-37.5	-12.5	42.9	3.7
	<i>Center of tire</i>	42.3	-29.8	-47.0	-15.7	42.3	3.7
	<i>Inner edge of tire</i>	38.6	38.6	154.2	51.4	38.6	5.2
	<i>Center between both tires</i>	21.8	-17.8	-31.6	-10.5	21.8	7.3
2 inches Below Surface	<i>Outer edge of tire</i>	96.2	27.5	178.7	59.6	96.2	2.1
	<i>Center of tire</i>	119.7	37.7	232.8	77.6	119.7	1.8
	<i>Inner edge of tire</i>	95.2	28.1	179.6	59.9	95.2	2.2
	<i>Center between both tires</i>	26.2	6.2	44.7	14.9	26.2	6.7
Mid AC Layer 1	<i>Outer edge of tire</i>	88.0	23.7	159.0	53.0	88.0	2.3
	<i>Center of tire</i>	122.0	37.6	234.9	78.3	122.0	1.8
	<i>Inner edge of tire</i>	81.5	28.3	166.3	55.4	81.5	2.5
	<i>Center between both tires</i>	36.3	15.0	81.3	27.1	36.3	5.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	66.1	26.0	143.9	48.0	66.1	3.0
	<i>Center of tire</i>	61.5	23.0	130.4	43.5	61.5	3.2
	<i>Inner edge of tire</i>	52.8	25.0	127.9	42.6	52.8	3.7
	<i>Center between both tires</i>	30.1	6.1	48.3	16.1	30.1	5.9
Mid AC Layer 1*	Center of tire*	122.0	37.6	234.9	78.3	122.0	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 29. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	50.8	-25.3	-25.2	-8.4	50.8	3.2
	<i>Center of tire</i>	43.7	-25.3	-32.0	-10.7	43.7	3.6
	<i>Inner edge of tire</i>	46.4	46.4	185.7	61.9	46.4	4.5
	<i>Center between both tires</i>	41.7	-7.5	19.2	6.4	41.7	4.1
2 inches Below Surface	<i>Outer edge of tire</i>	99.0	37.6	211.9	70.6	99.0	2.2
	<i>Center of tire</i>	116.8	39.0	233.7	77.9	116.8	1.9
	<i>Inner edge of tire</i>	93.4	33.3	193.2	64.4	93.4	2.2
	<i>Center between both tires</i>	35.2	13.6	76.1	25.4	35.2	5.2
Mid AC Layer 1	<i>Outer edge of tire</i>	93.0	23.6	163.8	54.6	93.0	2.2
	<i>Center of tire</i>	111.8	30.1	202.2	67.4	111.8	1.9
	<i>Inner edge of tire</i>	82.1	27.8	165.6	55.2	82.1	2.5
	<i>Center between both tires</i>	39.2	17.1	90.5	30.2	39.2	4.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	68.8	7.0	89.6	29.9	68.8	2.7
	<i>Center of tire</i>	75.2	6.6	94.9	31.6	75.2	2.5
	<i>Inner edge of tire</i>	53.8	11.9	89.4	29.8	53.8	3.5
	<i>Center between both tires</i>	37.6	6.9	58.2	19.4	37.6	4.8
2 inches Below Surface*	Center of tire*	116.8	39.0	233.7	77.9	116.8	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 30. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	46.4	-29.3	-41.6	-13.9	46.4	3.4
	<i>Center of tire</i>	43.9	-29.4	-44.3	-14.8	43.9	3.6
	<i>Inner edge of tire</i>	37.1	37.1	148.3	49.4	37.1	5.4
	<i>Center between both tires</i>	30.1	-11.6	-4.8	-1.6	30.1	5.5
2 inches Below Surface	<i>Outer edge of tire</i>	96.4	30.4	187.5	62.5	96.4	2.2
	<i>Center of tire</i>	117.5	34.8	221.9	74.0	117.5	1.8
	<i>Inner edge of tire</i>	93.7	30.2	184.3	61.4	93.7	2.2
	<i>Center between both tires</i>	29.7	10.2	60.2	20.1	29.7	6.1
Mid AC Layer 1	<i>Outer edge of tire</i>	89.9	24.0	162.0	54.0	89.9	2.3
	<i>Center of tire</i>	116.2	34.5	219.6	73.2	116.2	1.9
	<i>Inner edge of tire</i>	81.3	28.9	168.0	56.0	81.3	2.5
	<i>Center between both tires</i>	37.4	16.8	87.7	29.2	37.4	5.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	66.7	16.7	116.9	39.0	66.7	2.9
	<i>Center of tire</i>	66.4	16.2	115.0	38.3	66.4	2.9
	<i>Inner edge of tire</i>	50.5	18.2	105.2	35.1	50.5	3.8
	<i>Center between both tires</i>	34.8	5.8	52.1	17.4	34.8	5.1
2 inches Below Surface*	Center of tire*	117.5	34.8	221.9	74.0	117.5	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 31. 3D-Move Responses for EWR Pavement Under Gulfstream G600 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.6	-26.5	-34.8	-11.6	44.6	3.6
	<i>Center of tire</i>	43.3	-30.3	-47.6	-15.9	43.3	3.6
	<i>Inner edge of tire</i>	38.1	38.1	152.5	50.8	38.1	5.3
	<i>Center between both tires</i>	24.1	-14.8	-20.3	-6.8	24.1	6.7
2 inches Below Surface	<i>Outer edge of tire</i>	96.0	27.9	179.7	59.9	96.0	2.2
	<i>Center of tire</i>	120.1	38.5	235.5	78.5	120.1	1.8
	<i>Inner edge of tire</i>	94.5	28.6	180.3	60.1	94.5	2.2
	<i>Center between both tires</i>	27.2	7.7	50.2	16.7	27.2	6.5
Mid AC Layer 1	<i>Outer edge of tire</i>	88.5	24.0	160.5	53.5	88.5	2.3
	<i>Center of tire</i>	119.7	36.1	228.1	76.0	119.7	1.8
	<i>Inner edge of tire</i>	81.4	28.7	167.6	55.9	81.4	2.5
	<i>Center between both tires</i>	36.6	15.8	84.0	28.0	36.6	5.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	66.2	23.0	135.2	45.1	66.2	3.0
	<i>Center of tire</i>	62.9	20.8	125.4	41.8	62.9	3.1
	<i>Inner edge of tire</i>	52.5	23.4	122.7	40.9	52.5	3.7
	<i>Center between both tires</i>	32.2	6.1	50.4	16.8	32.2	5.5
Mid AC Layer 1*	Center of tire*	119.7	36.1	228.1	76.0	119.7	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Boeing 737 MAX 8 Aircraft

Table 32. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	49.2	-31.4	-45.1	-15.0	49.2	3.2
	<i>Center of tire</i>	44.9	-35.2	-60.5	-20.2	44.9	3.4
	<i>Inner edge of tire</i>	39.9	39.9	159.5	53.2	39.9	5.1
	<i>Center between both tires</i>	22.5	2.4	29.8	9.9	22.5	7.7
2 inches Below Surface	<i>Outer edge of tire</i>	100.1	39.0	217.2	72.4	100.1	2.2
	<i>Center of tire</i>	129.3	46.7	269.4	89.8	129.3	1.8
	<i>Inner edge of tire</i>	95.8	37.0	206.9	69.0	95.8	2.2
	<i>Center between both tires</i>	20.8	6.3	39.5	13.2	20.8	8.4
Mid AC Layer 1	<i>Outer edge of tire</i>	96.3	32.5	193.8	64.6	96.3	2.2
	<i>Center of tire</i>	129.8	45.3	265.7	88.6	129.8	1.7
	<i>Inner edge of tire</i>	91.1	36.7	201.0	67.0	91.1	2.3
	<i>Center between both tires</i>	23.3	6.0	41.3	13.8	23.3	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	87.1	27.7	170.1	56.7	87.1	2.4
	<i>Center of tire</i>	84.8	23.7	155.8	51.9	84.8	2.4
	<i>Inner edge of tire</i>	79.8	34.0	181.9	60.6	79.8	2.6
	<i>Center between both tires</i>	19.2	-0.8	16.7	5.6	19.2	8.9
Mid AC Layer 1*	Center of tire*	129.8	45.3	265.7	88.6	129.8	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 33. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.5	-31.6	-49.2	-16.4	45.5	3.4
	<i>Center of tire</i>	42.6	-33.4	-57.7	-19.2	42.6	3.6
	<i>Inner edge of tire</i>	38.8	38.8	155.1	51.7	38.8	5.2
	<i>Center between both tires</i>	17.4	2.1	23.6	7.9	17.4	9.9
2 inches Below Surface	<i>Outer edge of tire</i>	98.3	33.8	199.6	66.5	98.3	2.2
	<i>Center of tire</i>	128.4	45.6	265.1	88.4	128.4	1.8
	<i>Inner edge of tire</i>	96.4	35.9	204.1	68.0	96.4	2.2
	<i>Center between both tires</i>	17.3	5.1	32.7	10.9	17.3	10.0
Mid AC Layer 1	<i>Outer edge of tire</i>	94.1	32.8	192.5	64.2	94.1	2.2
	<i>Center of tire</i>	131.6	46.8	272.1	90.7	131.6	1.7
	<i>Inner edge of tire</i>	89.7	35.7	196.7	65.6	89.7	2.4
	<i>Center between both tires</i>	21.2	4.5	34.7	11.6	21.2	8.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	86.7	31.7	181.8	60.6	86.7	2.4
	<i>Center of tire</i>	81.9	28.0	166.0	55.3	81.9	2.5
	<i>Inner edge of tire</i>	80.4	36.0	188.4	62.8	80.4	2.6
	<i>Center between both tires</i>	15.5	-0.5	14.0	4.7	15.5	11.0
Mid AC Layer 1*	Center of tire*	131.6	46.8	272.1	90.7	131.6	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 34. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.0	-30.9	-49.6	-16.5	43.0	3.6
	<i>Center of tire</i>	74.8	135.4	480.9	160.3	74.8	3.7
	<i>Inner edge of tire</i>	38.0	38.0	151.9	50.6	38.0	5.3
	<i>Center between both tires</i>	14.4	1.7	19.4	6.5	14.4	11.9
2 inches Below Surface	<i>Outer edge of tire</i>	98.3	32.6	196.0	65.3	98.3	2.1
	<i>Center of tire</i>	127.2	45.6	264.0	88.0	127.2	1.8
	<i>Inner edge of tire</i>	96.6	34.5	200.1	66.7	96.6	2.2
	<i>Center between both tires</i>	15.3	4.4	28.5	9.5	15.3	11.3
Mid AC Layer 1	<i>Outer edge of tire</i>	93.1	32.4	190.1	63.4	93.1	2.2
	<i>Center of tire</i>	133.0	48.7	279.1	93.0	133.0	1.7
	<i>Inner edge of tire</i>	89.4	35.4	195.5	65.2	89.4	2.4
	<i>Center between both tires</i>	20.0	3.6	30.9	10.3	20.0	8.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	86.4	33.5	187.0	62.3	86.4	2.4
	<i>Center of tire</i>	80.1	29.0	167.2	55.7	80.1	2.5
	<i>Inner edge of tire</i>	80.7	36.7	190.7	63.6	80.7	2.6
	<i>Center between both tires</i>	13.0	-0.1	12.8	4.3	13.0	13.0
Mid AC Layer 1*	Center of tire*	133.0	48.7	279.1	93.0	133.0	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 35. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	52.8	-29.8	-36.6	-12.2	52.8	3.0
	<i>Center of tire</i>	46.1	-34.8	-58.3	-19.4	46.1	3.3
	<i>Inner edge of tire</i>	41.2	41.2	164.6	54.9	41.2	4.9
	<i>Center between both tires</i>	28.4	2.9	37.0	12.3	28.4	6.2
2 inches Below Surface	<i>Outer edge of tire</i>	101.4	40.7	223.6	74.5	101.4	2.1
	<i>Center of tire</i>	125.3	40.4	246.4	82.1	125.3	1.8
	<i>Inner edge of tire</i>	98.8	46.9	239.4	79.8	98.8	2.2
	<i>Center between both tires</i>	24.7	7.4	46.8	15.6	24.7	7.2
Mid AC Layer 1	<i>Outer edge of tire</i>	99.5	32.6	197.3	65.8	99.5	2.1
	<i>Center of tire</i>	128.1	43.5	258.5	86.2	128.1	1.8
	<i>Inner edge of tire</i>	93.1	36.7	203.2	67.7	93.1	2.3
	<i>Center between both tires</i>	25.8	7.7	49.0	16.3	25.8	6.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	87.6	21.9	153.2	51.1	87.6	2.3
	<i>Center of tire</i>	90.1	20.2	150.8	50.3	90.1	2.2
	<i>Inner edge of tire</i>	78.6	29.1	166.0	55.3	78.6	2.6
	<i>Center between both tires</i>	22.9	-0.5	21.5	7.2	22.9	7.5
Mid AC Layer 1*	Center of tire*	128.1	43.5	258.5	86.2	128.1	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 36. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	48.2	-31.6	-46.7	-15.6	48.2	3.2
	<i>Center of tire</i>	44.5	-35.0	-60.4	-20.1	44.5	3.4
	<i>Inner edge of tire</i>	39.6	39.6	158.3	52.8	39.6	5.1
	<i>Center between both tires</i>	21.0	2.3	27.9	9.3	21.0	8.2
2 inches Below Surface	<i>Outer edge of tire</i>	99.8	38.2	214.3	71.4	99.8	2.2
	<i>Center of tire</i>	129.2	46.2	267.9	89.3	129.2	1.8
	<i>Inner edge of tire</i>	95.7	36.2	204.4	68.1	95.7	2.2
	<i>Center between both tires</i>	19.8	6.0	37.6	12.5	19.8	8.9
Mid AC Layer 1	<i>Outer edge of tire</i>	95.6	32.4	192.9	64.3	95.6	2.2
	<i>Center of tire</i>	130.0	44.8	264.5	88.2	130.0	1.7
	<i>Inner edge of tire</i>	90.6	36.4	199.8	66.6	90.6	2.3
	<i>Center between both tires</i>	22.7	5.6	39.4	13.1	22.7	7.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	87.2	29.4	175.5	58.5	87.2	2.4
	<i>Center of tire</i>	84.2	25.9	161.9	54.0	84.2	2.4
	<i>Inner edge of tire</i>	80.0	34.7	184.1	61.4	80.0	2.6
	<i>Center between both tires</i>	18.2	-0.6	16.3	5.4	18.2	9.3
Mid AC Layer 1*	Center of tire*	130.0	44.8	264.5	88.2	130.0	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 37. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.9	-31.5	-49.4	-16.5	44.9	3.5
	<i>Center of tire</i>	42.1	-33.0	-56.8	-18.9	42.1	3.6
	<i>Inner edge of tire</i>	38.6	38.6	154.3	51.4	38.6	5.2
	<i>Center between both tires</i>	16.7	2.0	22.7	7.6	16.7	10.3
2 inches Below Surface	<i>Outer edge of tire</i>	98.3	33.5	198.6	66.2	98.3	2.1
	<i>Center of tire</i>	128.2	45.5	264.8	88.3	128.2	1.8
	<i>Inner edge of tire</i>	96.4	35.6	203.1	67.7	96.4	2.2
	<i>Center between both tires</i>	16.8	5.0	31.7	10.6	16.8	10.3
Mid AC Layer 1	<i>Outer edge of tire</i>	93.8	32.7	192.0	64.0	93.8	2.2
	<i>Center of tire</i>	131.7	46.6	271.5	90.5	131.7	1.7
	<i>Inner edge of tire</i>	89.7	36.0	197.7	65.9	89.7	2.4
	<i>Center between both tires</i>	20.9	4.3	33.8	11.3	20.9	8.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	86.6	32.1	183.0	61.0	86.6	2.4
	<i>Center of tire</i>	81.7	29.3	169.5	56.5	81.7	2.5
	<i>Inner edge of tire</i>	80.4	36.2	189.0	63.0	80.4	2.6
	<i>Center between both tires</i>	14.9	-0.4	13.6	4.5	14.9	11.4
Mid AC Layer 1*	Center of tire*	131.7	46.6	271.5	90.5	131.7	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 38. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	56.7	-30.8	-35.8	-11.9	56.7	2.8
	<i>Center of tire</i>	46.3	-31.7	-48.7	-16.2	46.3	3.4
	<i>Inner edge of tire</i>	53.4	53.4	213.6	71.2	53.4	4.0
	<i>Center between both tires</i>	36.8	4.3	49.6	16.5	36.8	4.8
2 inches Below Surface	<i>Outer edge of tire</i>	104.2	42.7	232.2	77.4	104.2	2.1
	<i>Center of tire</i>	125.7	44.4	258.8	86.3	125.7	1.8
	<i>Inner edge of tire</i>	100.2	46.6	240.1	80.0	100.2	2.2
	<i>Center between both tires</i>	30.2	9.0	57.1	19.0	30.2	5.9
Mid AC Layer 1	<i>Outer edge of tire</i>	104.3	31.5	198.8	66.3	104.3	2.0
	<i>Center of tire</i>	125.6	37.5	238.0	79.3	125.6	1.8
	<i>Inner edge of tire</i>	97.0	37.2	208.6	69.5	97.0	2.2
	<i>Center between both tires</i>	29.3	9.9	59.1	19.7	29.3	6.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	88.8	13.0	127.7	42.6	88.8	2.2
	<i>Center of tire</i>	98.8	10.3	129.8	43.3	98.8	2.0
	<i>Inner edge of tire</i>	77.5	18.6	133.2	44.4	77.5	2.5
	<i>Center between both tires</i>	27.2	0.1	27.5	9.2	27.2	6.4
Mid AC Layer 1*	Center of tire*	125.6	37.5	238.0	79.3	125.6	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 39. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	51.6	-30.4	-39.6	-13.2	51.6	3.1
	<i>Center of tire</i>	45.8	-35.2	-59.6	-19.9	45.8	3.3
	<i>Inner edge of tire</i>	40.7	40.7	162.7	54.2	40.7	5.0
	<i>Center between both tires</i>	26.6	2.8	35.0	11.7	26.6	6.6
2 inches Below Surface	<i>Outer edge of tire</i>	100.7	39.8	220.1	73.4	100.7	2.1
	<i>Center of tire</i>	129.3	48.4	274.5	91.5	129.3	1.8
	<i>Inner edge of tire</i>	98.2	45.8	235.5	78.5	98.2	2.2
	<i>Center between both tires</i>	23.5	7.1	44.8	14.9	23.5	7.5
Mid AC Layer 1	<i>Outer edge of tire</i>	98.3	32.7	196.6	65.5	98.3	2.1
	<i>Center of tire</i>	128.3	43.1	257.5	85.8	128.3	1.8
	<i>Inner edge of tire</i>	92.4	37.3	204.4	68.1	92.4	2.3
	<i>Center between both tires</i>	25.0	7.2	46.7	15.6	25.0	7.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	87.7	24.7	161.8	53.9	87.7	2.3
	<i>Center of tire</i>	87.9	20.8	150.3	50.1	87.9	2.3
	<i>Inner edge of tire</i>	79.1	31.3	173.0	57.7	79.1	2.6
	<i>Center between both tires</i>	21.8	-0.7	19.6	6.5	21.8	7.8
Mid AC Layer 1*	Center of tire*	128.3	43.1	257.5	85.8	128.3	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 40. 3D-Move Responses for EWR Pavement Under Boeing 737 MAX 8 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	47.5	-31.6	-47.3	-15.8	47.5	3.3
	<i>Center of tire</i>	44.0	-34.6	-59.8	-19.9	44.0	3.5
	<i>Inner edge of tire</i>	39.3	39.3	157.3	52.4	39.3	5.1
	<i>Center between both tires</i>	20.2	2.3	27.1	9.0	20.2	8.5
2 inches Below Surface	<i>Outer edge of tire</i>	99.5	37.7	212.6	70.9	99.5	2.2
	<i>Center of tire</i>	129.2	46.1	267.5	89.2	129.2	1.8
	<i>Inner edge of tire</i>	95.7	35.9	203.3	67.8	95.7	2.2
	<i>Center between both tires</i>	19.3	5.8	36.7	12.2	19.3	9.1
Mid AC Layer 1	<i>Outer edge of tire</i>	95.0	32.5	192.6	64.2	95.0	2.2
	<i>Center of tire</i>	130.1	44.7	264.2	88.1	130.1	1.7
	<i>Inner edge of tire</i>	90.3	36.4	199.5	66.5	90.3	2.3
	<i>Center between both tires</i>	22.4	5.4	38.5	12.8	22.4	7.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	87.1	30.3	178.1	59.4	87.1	2.4
	<i>Center of tire</i>	82.8	24.1	155.0	51.7	82.8	2.4
	<i>Inner edge of tire</i>	80.2	35.3	186.2	62.1	80.2	2.6
	<i>Center between both tires</i>	17.6	-0.6	15.9	5.3	17.6	9.6
Mid AC Layer 1*	Center of tire*	130.1	44.7	264.2	88.1	130.1	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Boeing 777-200 Aircraft

Table 41. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.2	-34.8	-59.2	-19.7	45.2	3.4
	<i>Center of tire</i>	45.5	-30.9	-47.0	-15.7	45.5	3.4
	<i>Inner edge of tire</i>	38.5	38.5	154.0	51.3	38.5	5.2
	<i>Center between both tires</i>	15.0	1.3	19.0	6.3	15.0	11.4
2 inches Below Surface	<i>Outer edge of tire</i>	88.4	31.5	182.8	60.9	88.4	2.3
	<i>Center of tire</i>	120.9	41.2	244.6	81.5	120.9	1.8
	<i>Inner edge of tire</i>	87.2	29.0	174.1	58.0	87.2	2.4
	<i>Center between both tires</i>	13.2	3.7	24.2	8.1	13.2	13.1
Mid AC Layer 1	<i>Outer edge of tire</i>	85.5	27.0	166.5	55.5	85.5	2.4
	<i>Center of tire</i>	119.1	37.2	230.7	76.9	119.1	1.8
	<i>Inner edge of tire</i>	84.4	28.4	169.6	56.5	84.4	2.4
	<i>Center between both tires</i>	11.2	3.7	22.4	7.5	11.2	15.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	79.0	23.6	149.9	50.0	79.0	2.5
	<i>Center of tire</i>	80.5	23.5	151.0	50.3	80.5	2.5
	<i>Inner edge of tire</i>	78.2	25.5	154.9	51.6	78.2	2.6
	<i>Center between both tires</i>	7.8	2.7	15.8	5.3	7.8	21.9
2 inches Below Surface*	Center of tire*	120.9	41.2	244.6	81.5	120.9	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 42. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	42.4	-27.6	-40.4	-13.5	42.4	3.7
	<i>Center of tire</i>	70.1	115.5	416.6	138.9	70.1	3.7
	<i>Inner edge of tire</i>	36.6	36.6	146.4	48.8	36.6	5.4
	<i>Center between both tires</i>	11.6	0.6	13.5	4.5	11.6	14.6
2 inches Below Surface	<i>Outer edge of tire</i>	86.6	27.7	169.8	56.6	86.6	2.4
	<i>Center of tire</i>	118.9	41.9	244.5	81.5	118.9	1.9
	<i>Inner edge of tire</i>	86.7	28.1	170.9	57.0	86.7	2.4
	<i>Center between both tires</i>	10.3	3.0	19.2	6.4	10.3	16.6
Mid AC Layer 1	<i>Outer edge of tire</i>	83.4	27.5	165.8	55.3	83.4	2.4
	<i>Center of tire</i>	119.5	40.1	239.8	79.9	119.5	1.8
	<i>Inner edge of tire</i>	82.5	28.8	168.8	56.3	82.5	2.5
	<i>Center between both tires</i>	8.6	3.0	17.6	5.9	8.6	19.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	78.8	28.0	162.7	54.2	78.8	2.6
	<i>Center of tire</i>	76.1	24.0	148.0	49.3	76.1	2.6
	<i>Inner edge of tire</i>	77.8	28.9	164.4	54.8	77.8	2.6
	<i>Center between both tires</i>	6.0	2.0	12.0	4.0	6.0	28.2
Mid AC Layer 1*	Center of tire*	119.5	40.1	239.8	79.9	119.5	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 43. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.6	-26.0	-38.4	-12.8	39.6	4.0
	<i>Center of tire</i>	72.7	114.5	416.1	138.7	72.7	3.6
	<i>Inner edge of tire</i>	35.0	35.0	140.1	46.7	35.0	5.7
	<i>Center between both tires</i>	9.5	0.2	10.1	3.4	9.5	17.7
2 inches Below Surface	<i>Outer edge of tire</i>	86.3	27.5	168.9	56.3	86.3	2.4
	<i>Center of tire</i>	116.9	43.0	245.9	82.0	116.9	1.9
	<i>Inner edge of tire</i>	86.8	29.0	173.8	57.9	86.8	2.4
	<i>Center between both tires</i>	8.6	2.5	16.0	5.3	8.6	19.8
Mid AC Layer 1	<i>Outer edge of tire</i>	82.4	28.4	167.5	55.8	82.4	2.5
	<i>Center of tire</i>	119.8	42.9	248.6	82.9	119.8	1.9
	<i>Inner edge of tire</i>	81.5	29.0	168.4	56.1	81.5	2.5
	<i>Center between both tires</i>	7.1	2.5	14.7	4.9	7.1	23.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	78.4	29.4	166.7	55.6	78.4	2.6
	<i>Center of tire</i>	75.2	28.7	161.2	53.7	75.2	2.7
	<i>Inner edge of tire</i>	77.4	30.3	168.1	56.0	77.4	2.6
	<i>Center between both tires</i>	4.9	1.6	9.6	3.2	4.9	34.4
Mid AC Layer 1*	Center of tire*	119.8	42.9	248.6	82.9	119.8	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 44. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	49.3	-35.2	-56.5	-18.8	49.3	3.1
	<i>Center of tire</i>	48.1	-32.8	-50.5	-16.8	48.1	3.2
	<i>Inner edge of tire</i>	38.9	38.9	155.5	51.8	38.9	5.2
	<i>Center between both tires</i>	18.6	2.0	24.5	8.2	18.6	9.2
2 inches Below Surface	<i>Outer edge of tire</i>	89.3	31.7	184.6	61.5	89.3	2.3
	<i>Center of tire</i>	119.0	34.0	221.1	73.7	119.0	1.8
	<i>Inner edge of tire</i>	87.4	28.8	174.0	58.0	87.4	2.4
	<i>Center between both tires</i>	16.1	4.4	29.4	9.8	16.1	10.7
Mid AC Layer 1	<i>Outer edge of tire</i>	88.0	25.5	164.7	54.9	88.0	2.3
	<i>Center of tire</i>	118.6	34.1	221.0	73.7	118.6	1.8
	<i>Inner edge of tire</i>	86.9	27.9	170.6	56.9	86.9	2.4
	<i>Center between both tires</i>	13.8	4.5	27.2	9.1	13.8	12.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	79.5	18.3	134.4	44.8	79.5	2.5
	<i>Center of tire</i>	84.8	18.0	138.7	46.2	84.8	2.3
	<i>Inner edge of tire</i>	78.7	20.7	140.8	46.9	78.7	2.5
	<i>Center between both tires</i>	9.6	3.4	19.7	6.6	9.6	17.8
Mid AC Layer 1*	Center of tire*	119.0	34.0	221.1	73.7	119.0	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 45. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.2	-34.5	-59.4	-19.8	44.2	3.5
	<i>Center of tire</i>	44.7	-30.1	-45.5	-15.2	44.7	3.5
	<i>Inner edge of tire</i>	38.1	38.1	152.3	50.8	38.1	5.3
	<i>Center between both tires</i>	14.0	1.1	17.3	5.8	14.0	12.2
2 inches Below Surface	<i>Outer edge of tire</i>	88.1	31.0	181.0	60.3	88.1	2.4
	<i>Center of tire</i>	120.5	41.2	244.2	81.4	120.5	1.8
	<i>Inner edge of tire</i>	87.1	28.6	173.0	57.7	87.1	2.4
	<i>Center between both tires</i>	12.3	3.5	22.7	7.6	12.3	14.0
Mid AC Layer 1	<i>Outer edge of tire</i>	84.9	27.1	166.2	55.4	84.9	2.4
	<i>Center of tire</i>	118.9	37.1	230.3	76.8	118.9	1.8
	<i>Inner edge of tire</i>	83.9	28.5	169.3	56.4	83.9	2.4
	<i>Center between both tires</i>	10.4	3.5	20.9	7.0	10.4	16.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	79.0	25.3	154.9	51.6	79.0	2.5
	<i>Center of tire</i>	78.9	22.2	145.5	48.5	78.9	2.5
	<i>Inner edge of tire</i>	78.1	26.4	157.4	52.5	78.1	2.6
	<i>Center between both tires</i>	7.2	2.5	14.6	4.9	7.2	23.5
Mid AC Layer 1*	Center of tire*	118.9	37.1	230.3	76.8	118.9	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 46. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.7	-27.3	-40.0	-13.3	41.7	3.8
	<i>Center of tire</i>	70.8	115.1	416.2	138.7	70.8	3.7
	<i>Inner edge of tire</i>	36.2	36.2	144.9	48.3	36.2	5.5
	<i>Center between both tires</i>	11.1	0.5	12.7	4.2	11.1	15.3
2 inches Below Surface	<i>Outer edge of tire</i>	86.6	27.7	169.6	56.5	86.6	2.4
	<i>Center of tire</i>	118.5	42.1	244.7	81.6	118.5	1.9
	<i>Inner edge of tire</i>	87.0	29.2	174.6	58.2	87.0	2.4
	<i>Center between both tires</i>	9.9	2.8	18.4	6.1	9.9	17.3
Mid AC Layer 1	<i>Outer edge of tire</i>	83.1	27.6	165.8	55.3	83.1	2.5
	<i>Center of tire</i>	119.3	40.1	239.7	79.9	119.3	1.8
	<i>Inner edge of tire</i>	82.2	28.8	168.8	56.3	82.2	2.5
	<i>Center between both tires</i>	8.3	2.9	16.9	5.6	8.3	20.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	78.7	28.4	163.8	54.6	78.7	2.6
	<i>Center of tire</i>	75.8	25.1	151.1	50.4	75.8	2.6
	<i>Inner edge of tire</i>	77.7	29.3	165.5	55.2	77.7	2.6
	<i>Center between both tires</i>	5.7	1.9	11.5	3.8	5.7	29.5
Mid AC Layer 1*	Center of tire*	119.3	40.1	239.7	79.9	119.3	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 47. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	54.2	-33.9	-47.6	-15.9	54.2	2.9
	<i>Center of tire</i>	49.4	-32.5	-48.0	-16.0	49.4	3.1
	<i>Inner edge of tire</i>	42.5	42.5	170.1	56.7	42.5	4.8
	<i>Center between both tires</i>	23.7	2.8	32.1	10.7	23.7	7.3
2 inches Below Surface	<i>Outer edge of tire</i>	91.0	32.5	188.5	62.8	91.0	2.3
	<i>Center of tire</i>	119.9	36.1	228.4	76.1	119.9	1.8
	<i>Inner edge of tire</i>	88.9	31.8	184.2	61.4	88.9	2.3
	<i>Center between both tires</i>	20.2	5.5	36.7	12.2	20.2	8.6
Mid AC Layer 1	<i>Outer edge of tire</i>	92.1	24.9	166.9	55.6	92.1	2.2
	<i>Center of tire</i>	118.5	31.1	211.7	70.6	118.5	1.8
	<i>Inner edge of tire</i>	90.4	27.6	173.2	57.7	90.4	2.3
	<i>Center between both tires</i>	17.2	5.6	34.0	11.3	17.2	10.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	80.9	10.5	112.4	37.5	80.9	2.4
	<i>Center of tire</i>	91.9	9.3	119.6	39.9	91.9	2.1
	<i>Inner edge of tire</i>	79.6	13.4	119.8	39.9	79.6	2.4
	<i>Center between both tires</i>	12.3	4.3	25.2	8.4	12.3	14.1
Mid AC Layer 1*	Center of tire*	118.5	31.1	211.7	70.6	118.5	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 48. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	48.0	-35.3	-57.8	-19.3	48.0	3.2
	<i>Center of tire</i>	47.5	-32.5	-50.0	-16.7	47.5	3.3
	<i>Inner edge of tire</i>	38.4	38.4	153.7	51.2	38.4	5.2
	<i>Center between both tires</i>	17.4	1.8	22.7	7.6	17.4	9.8
2 inches Below Surface	<i>Outer edge of tire</i>	89.4	32.7	187.5	62.5	89.4	2.3
	<i>Center of tire</i>	118.7	33.8	220.1	73.4	118.7	1.8
	<i>Inner edge of tire</i>	87.7	30.0	177.7	59.2	87.7	2.4
	<i>Center between both tires</i>	15.1	4.2	27.7	9.2	15.1	11.4
Mid AC Layer 1	<i>Outer edge of tire</i>	87.4	26.6	167.1	55.7	87.4	2.3
	<i>Center of tire</i>	118.4	34.1	220.6	73.5	118.4	1.8
	<i>Inner edge of tire</i>	86.0	28.1	170.4	56.8	86.0	2.4
	<i>Center between both tires</i>	12.9	4.2	25.6	8.5	12.9	13.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	79.3	19.9	139.1	46.4	79.3	2.5
	<i>Center of tire</i>	83.7	20.9	146.3	48.8	83.7	2.4
	<i>Inner edge of tire</i>	78.6	22.3	145.4	48.5	78.6	2.5
	<i>Center between both tires</i>	9.0	3.1	18.3	6.1	9.0	19.0
2 inches Below Surface*	Center of tire*	118.7	33.8	220.1	73.4	118.7	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 49. 3D-Move Responses for EWR Pavement Under Boeing 777-200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.3	-34.2	-59.2	-19.7	43.3	3.5
	<i>Center of tire</i>	44.0	-29.4	-44.1	-14.7	44.0	3.6
	<i>Inner edge of tire</i>	37.7	37.7	150.7	50.2	37.7	5.3
	<i>Center between both tires</i>	13.5	1.0	16.6	5.5	13.5	12.6
2 inches Below Surface	<i>Outer edge of tire</i>	87.9	30.7	180.1	60.0	87.9	2.4
	<i>Center of tire</i>	120.2	41.4	244.5	81.5	120.2	1.8
	<i>Inner edge of tire</i>	86.9	28.5	172.5	57.5	86.9	2.4
	<i>Center between both tires</i>	11.8	3.4	22.0	7.3	11.8	14.5
Mid AC Layer 1	<i>Outer edge of tire</i>	84.4	27.3	166.4	55.5	84.4	2.4
	<i>Center of tire</i>	120.1	40.2	240.8	80.3	120.1	1.8
	<i>Inner edge of tire</i>	83.5	28.7	169.5	56.5	83.5	2.5
	<i>Center between both tires</i>	10.0	3.4	20.2	6.7	10.0	17.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	79.0	26.1	157.3	52.4	79.0	2.6
	<i>Center of tire</i>	78.5	23.7	149.7	49.9	78.5	2.6
	<i>Inner edge of tire</i>	78.0	27.2	159.7	53.2	78.0	2.6
	<i>Center between both tires</i>	7.0	2.4	14.1	4.7	7.0	24.4
Mid AC Layer 1*	Center of tire*	120.1	40.2	240.8	80.3	120.1	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Reno Stead Airport (RTS)

Beechcraft King Air B200 Aircraft

Table 50. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	23.9	-12.7	-14.2	-4.7	23.9	6.8
	<i>Center of tire</i>	22.1	-13.9	-19.7	-6.6	22.1	7.3
	<i>Inner edge of tire</i>	20.2	20.2	80.6	26.9	20.2	9.2
	<i>Center between both tires</i>	12.6	-3.7	1.6	0.5	12.6	13.2
2 inches Below Surface	<i>Outer edge of tire</i>	48.3	10.9	80.9	27.0	48.3	3.8
	<i>Center of tire</i>	60.6	18.4	115.8	38.6	60.6	3.2
	<i>Inner edge of tire</i>	45.1	13.0	84.1	28.0	45.1	4.1
	<i>Center between both tires</i>	13.6	4.4	26.7	8.9	13.6	12.7
Bottom AC Layer	<i>Outer edge of tire</i>	39.8	6.3	58.7	19.6	39.8	4.5
	<i>Center of tire</i>	43.8	8.4	69.0	23.0	43.8	4.2
	<i>Inner edge of tire</i>	35.0	8.5	60.4	20.1	35.0	5.1
	<i>Center between both tires</i>	10.8	1.4	15.0	5.0	10.8	15.7
2 inches Below Surface*	Center of tire*	60.6	18.4	115.8	38.6	60.6	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 51. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	22.3	-13.1	-16.8	-5.6	22.3	7.3
	<i>Center of tire</i>	21.1	-13.6	-19.8	-6.6	21.1	7.7
	<i>Inner edge of tire</i>	19.6	19.6	78.5	26.2	19.6	9.4
	<i>Center between both tires</i>	9.2	-3.8	-2.2	-0.7	9.2	18.0
2 inches Below Surface	<i>Outer edge of tire</i>	46.9	11.8	82.3	27.4	46.9	3.9
	<i>Center of tire</i>	61.6	20.6	123.6	41.2	61.6	3.2
	<i>Inner edge of tire</i>	44.1	13.5	84.7	28.2	44.1	4.2
	<i>Center between both tires</i>	13.4	3.8	24.6	8.2	13.4	12.8
Bottom AC Layer	<i>Outer edge of tire</i>	39.1	9.4	67.2	22.4	39.1	4.6
	<i>Center of tire</i>	40.4	13.3	80.2	26.7	40.4	4.6
	<i>Inner edge of tire</i>	34.7	11.6	69.4	23.1	34.7	5.2
	<i>Center between both tires</i>	9.6	1.2	13.1	4.4	9.6	17.6
2 inches Below Surface*	Center of tire*	61.6	20.6	123.6	41.2	61.6	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 52. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	Outer edge of tire	21.3	-13.2	-18.4	-6.1	21.3	7.6
	Center of tire	21.2	-3.4	10.9	3.6	21.2	8.0
	Inner edge of tire	19.3	19.3	77.3	25.8	19.3	9.5
	Center between both tires	6.9	-3.9	-4.7	-1.6	6.9	23.8
2 inches Below Surface	Outer edge of tire	46.0	12.3	82.8	27.6	46.0	4.0
	Center of tire	62.8	22.1	129.0	43.0	62.8	3.1
	Inner edge of tire	43.5	13.8	85.0	28.3	43.5	4.3
	Center between both tires	13.3	3.3	23.1	7.7	13.3	12.9
Bottom AC Layer	Outer edge of tire	38.8	11.4	73.1	24.4	38.8	4.7
	Center of tire	38.5	15.3	84.4	28.1	38.5	4.8
	Inner edge of tire	34.8	13.2	74.4	24.8	34.8	5.3
	Center between both tires	8.7	1.1	12.2	4.1	8.7	19.4
2 inches Below Surface*	Center of tire*	62.8	22.1	129.0	43.0	62.8	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 53. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	Outer edge of tire	25.8	-12.0	-10.3	-3.4	25.8	6.4
	Center of tire	23.0	-13.8	-18.4	-6.1	23.0	7.1
	Inner edge of tire	22.2	22.2	88.8	29.6	22.2	8.4
	Center between both tires	16.5	-3.7	5.5	1.8	16.5	10.1
2 inches Below Surface	Outer edge of tire	50.1	9.8	79.5	26.5	50.1	3.7
	Center of tire	60.1	16.2	108.8	36.3	60.1	3.2
	Inner edge of tire	46.5	12.2	83.0	27.7	46.5	4.0
	Center between both tires	13.8	4.9	28.5	9.5	13.8	12.5
Bottom AC Layer	Outer edge of tire	40.8	2.1	47.2	15.7	40.8	4.3
	Center of tire	48.3	2.1	54.7	18.2	48.3	3.7
	Inner edge of tire	35.9	4.5	49.3	16.4	35.9	4.9
	Center between both tires	13.2	4.5	26.7	8.9	13.2	13.0
2 inches Below Surface*	Center of tire*	60.1	16.2	108.8	36.3	60.1	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 54. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	Outer edge of tire	23.6	-12.7	-14.6	-4.9	23.6	6.9
	Center of tire	21.8	-13.8	-19.6	-6.5	21.8	7.4
	Inner edge of tire	20.0	20.0	80.1	26.7	20.0	9.2
	Center between both tires	11.9	-3.6	1.0	0.3	11.9	14.0
2 inches Below Surface	Outer edge of tire	48.0	11.1	81.2	27.1	48.0	3.8
	Center of tire	60.8	19.2	118.4	39.5	60.8	3.2
	Inner edge of tire	44.9	13.1	84.3	28.1	44.9	4.1
	Center between both tires	13.5	4.3	26.3	8.8	13.5	12.7
Bottom AC Layer	Outer edge of tire	39.6	7.0	60.5	20.2	39.6	4.5
	Center of tire	43.1	9.8	72.6	24.2	43.1	4.2
	Inner edge of tire	34.9	9.1	62.2	20.7	34.9	5.2
	Center between both tires	10.6	1.3	14.5	4.8	10.6	16.0
2 inches Below Surface*	Center of tire*	60.8	19.2	118.4	39.5	60.8	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 55. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	22.1	-13.0	-17.0	-5.7	22.1	7.3
	<i>Center of tire</i>	20.9	-13.5	-19.7	-6.6	20.9	7.7
	<i>Inner edge of tire</i>	19.6	19.6	78.3	26.1	19.6	9.4
	<i>Center between both tires</i>	8.8	-3.8	-2.6	-0.9	8.8	18.8
2 inches Below Surface	<i>Outer edge of tire</i>	46.8	11.9	82.4	27.5	46.8	4.0
	<i>Center of tire</i>	61.9	21.2	125.4	41.8	61.9	3.1
	<i>Inner edge of tire</i>	44.0	13.6	84.8	28.3	44.0	4.2
	<i>Center between both tires</i>	13.4	3.7	24.4	8.1	13.4	12.9
Bottom AC Layer	<i>Outer edge of tire</i>	39.0	9.7	68.2	22.7	39.0	4.7
	<i>Center of tire</i>	40.1	14.0	82.2	27.4	40.1	4.6
	<i>Inner edge of tire</i>	34.7	11.9	70.3	23.4	34.7	5.2
	<i>Center between both tires</i>	9.5	1.3	13.5	4.5	9.5	17.9
2 inches Below Surface*	Center of tire*	61.9	21.2	125.4	41.8	61.9	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 56. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	28.4	-10.7	-3.7	-1.2	28.4	5.8
	<i>Center of tire</i>	23.9	-12.9	-14.9	-5.0	23.9	6.8
	<i>Inner edge of tire</i>	26.3	26.3	105.3	35.1	26.3	7.2
	<i>Center between both tires</i>	21.9	-3.7	10.7	3.6	21.9	7.7
2 inches Below Surface	<i>Outer edge of tire</i>	52.5	8.3	77.3	25.8	52.5	3.5
	<i>Center of tire</i>	60.4	13.4	100.7	33.6	60.4	3.1
	<i>Inner edge of tire</i>	48.4	11.0	81.4	27.1	48.4	3.8
	<i>Center between both tires</i>	14.3	5.4	30.4	10.1	14.3	12.1
Bottom AC Layer	<i>Outer edge of tire</i>	43.0	-3.4	32.7	10.9	43.0	4.0
	<i>Center of tire</i>	54.7	-7.6	31.8	10.6	54.7	3.2
	<i>Inner edge of tire</i>	38.2	-1.3	34.2	11.4	38.2	4.6
	<i>Center between both tires</i>	17.6	4.0	29.5	9.8	17.6	9.8
2 inches Below Surface*	Center of tire*	60.4	13.4	100.7	33.6	60.4	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 57. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	25.4	-12.0	-10.8	-3.6	25.4	6.5
	<i>Center of tire</i>	22.7	-13.7	-18.4	-6.1	22.7	7.1
	<i>Inner edge of tire</i>	21.6	21.6	86.4	28.8	21.6	8.6
	<i>Center between both tires</i>	15.8	-3.8	4.2	1.4	15.8	10.6
2 inches Below Surface	<i>Outer edge of tire</i>	49.7	10.1	80.1	26.7	49.7	3.7
	<i>Center of tire</i>	60.1	16.4	109.3	36.4	60.1	3.2
	<i>Inner edge of tire</i>	46.2	12.5	83.6	27.9	46.2	4.0
	<i>Center between both tires</i>	13.8	4.9	28.5	9.5	13.8	12.5
Bottom AC Layer	<i>Outer edge of tire</i>	40.6	3.1	49.9	16.6	40.6	4.4
	<i>Center of tire</i>	47.2	3.4	57.3	19.1	47.2	3.8
	<i>Inner edge of tire</i>	35.7	5.4	51.9	17.3	35.7	5.0
	<i>Center between both tires</i>	12.6	4.4	25.9	8.6	12.6	13.7
2 inches Below Surface*	Center of tire*	60.1	16.4	109.3	36.4	60.1	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 58. 3D-Move Responses for RTS Pavement Under Beechcraft King Air B200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	23.4	-12.7	-14.7	-4.9	23.4	7.0
	<i>Center of tire</i>	21.7	-13.7	-19.5	-6.5	21.7	7.5
	<i>Inner edge of tire</i>	20.0	20.0	80.0	26.7	20.0	9.2
	<i>Center between both tires</i>	11.5	-3.8	0.1	0.0	11.5	14.4
2 inches Below Surface	<i>Outer edge of tire</i>	47.9	11.3	81.6	27.2	47.9	3.9
	<i>Center of tire</i>	60.9	19.3	118.9	39.6	60.9	3.2
	<i>Inner edge of tire</i>	44.8	13.3	84.6	28.2	44.8	4.1
	<i>Center between both tires</i>	13.5	4.3	26.3	8.8	13.5	12.7
Bottom AC Layer	<i>Outer edge of tire</i>	39.6	7.5	62.1	20.7	39.6	4.6
	<i>Center of tire</i>	42.5	10.1	72.9	24.3	42.5	4.3
	<i>Inner edge of tire</i>	34.9	9.6	63.7	21.2	34.9	5.2
	<i>Center between both tires</i>	10.5	1.5	14.9	5.0	10.5	16.1
2 inches Below Surface*	Center of tire*	60.9	19.3	118.9	39.6	60.9	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Bombardier CRJ 200 Aircraft

Table 59. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.0	-20.6	-22.7	-7.6	39.0	4.1
	<i>Center of tire</i>	35.0	-25.5	-41.3	-13.8	35.0	4.5
	<i>Inner edge of tire</i>	31.4	31.4	125.7	41.9	31.4	6.2
	<i>Center between both tires</i>	23.9	-3.3	14.2	4.7	23.9	7.1
2 inches Below Surface	<i>Outer edge of tire</i>	80.8	23.8	152.2	50.7	80.8	2.5
	<i>Center of tire</i>	97.1	33.2	196.7	65.6	97.1	2.2
	<i>Inner edge of tire</i>	76.3	25.7	153.4	51.1	76.3	2.6
	<i>Center between both tires</i>	18.1	6.3	36.9	12.3	18.1	9.6
Bottom AC Layer	<i>Outer edge of tire</i>	79.6	16.0	127.5	42.5	79.6	2.5
	<i>Center of tire</i>	86.7	16.6	136.5	45.5	86.7	2.3
	<i>Inner edge of tire</i>	73.1	18.7	129.2	43.1	73.1	2.7
	<i>Center between both tires</i>	15.7	5.1	30.9	10.3	15.7	11.0
2 inches Below Surface*	Center of tire*	97.1	33.2	196.7	65.6	97.1	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 60. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	34.5	-20.1	-25.8	-8.6	34.5	4.7
	<i>Center of tire</i>	31.5	-22.9	-37.3	-12.4	31.5	5.0
	<i>Inner edge of tire</i>	28.9	28.9	115.5	38.5	28.9	6.7
	<i>Center between both tires</i>	18.3	-2.7	10.1	3.4	18.3	9.2
2 inches Below Surface	<i>Outer edge of tire</i>	76.8	24.9	151.6	50.5	76.8	2.6
	<i>Center of tire</i>	96.7	36.8	207.0	69.0	96.7	2.2
	<i>Inner edge of tire</i>	73.2	27.4	155.5	51.8	73.2	2.8
	<i>Center between both tires</i>	16.6	5.1	31.9	10.6	16.6	10.5
Bottom AC Layer	<i>Outer edge of tire</i>	78.5	20.2	139.1	46.4	78.5	2.5
	<i>Center of tire</i>	80.2	20.8	142.8	47.6	80.2	2.5
	<i>Inner edge of tire</i>	73.0	23.2	142.5	47.5	73.0	2.7
	<i>Center between both tires</i>	12.9	1.3	16.8	5.6	12.9	13.1
2 inches Below Surface*	Center of tire*	96.7	36.8	207.0	69.0	96.7	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 61. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	31.6	-19.7	-27.6	-9.2	31.6	5.1
	<i>Center of tire</i>	52.3	111.4	386.5	128.8	52.3	4.8
	<i>Inner edge of tire</i>	27.3	27.3	109.2	36.4	27.3	7.0
	<i>Center between both tires</i>	14.8	-2.5	7.3	2.4	14.8	11.4
2 inches Below Surface	<i>Outer edge of tire</i>	74.5	26.3	153.4	51.1	74.5	2.7
	<i>Center of tire</i>	97.1	40.1	217.3	72.4	97.1	2.2
	<i>Inner edge of tire</i>	71.3	28.5	157.0	52.3	71.3	2.8
	<i>Center between both tires</i>	15.5	4.3	28.4	9.5	15.5	11.1
Bottom AC Layer	<i>Outer edge of tire</i>	77.7	22.6	145.6	48.5	77.7	2.6
	<i>Center of tire</i>	78.1	27.0	159.2	53.1	78.1	2.6
	<i>Inner edge of tire</i>	72.9	25.2	148.5	49.5	72.9	2.7
	<i>Center between both tires</i>	11.4	2.4	18.6	6.2	11.4	15.0
2 inches Below Surface*	Center of tire*	97.1	40.1	217.3	72.4	97.1	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 62. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.2	-20.7	-17.8	-5.9	44.2	3.7
	<i>Center of tire</i>	38.5	-27.4	-43.8	-14.6	38.5	4.1
	<i>Inner edge of tire</i>	39.3	39.3	157.1	52.4	39.3	5.1
	<i>Center between both tires</i>	30.8	-4.3	17.9	6.0	30.8	5.5
2 inches Below Surface	<i>Outer edge of tire</i>	85.3	21.2	148.8	49.6	85.3	2.3
	<i>Center of tire</i>	99.8	33.0	198.9	66.3	99.8	2.1
	<i>Inner edge of tire</i>	80.6	24.5	154.1	51.4	80.6	2.5
	<i>Center between both tires</i>	19.8	7.4	42.1	14.0	19.8	8.9
Bottom AC Layer	<i>Outer edge of tire</i>	81.0	10.1	111.4	37.1	81.0	2.4
	<i>Center of tire</i>	94.2	6.5	113.8	37.9	94.2	2.0
	<i>Inner edge of tire</i>	73.7	13.2	113.3	37.8	73.7	2.6
	<i>Center between both tires</i>	19.8	6.8	40.4	13.5	19.8	8.8
Bottom AC Layer*	Center of tire*	94.2	6.5	113.8	37.9	94.2	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 63. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.0	-20.4	-23.0	-7.7	38.0	4.2
	<i>Center of tire</i>	34.2	-24.8	-40.1	-13.4	34.2	4.6
	<i>Inner edge of tire</i>	30.9	30.9	123.5	41.2	30.9	6.3
	<i>Center between both tires</i>	22.8	-3.1	13.5	4.5	22.8	7.4
2 inches Below Surface	<i>Outer edge of tire</i>	80.0	24.1	152.2	50.7	80.0	2.5
	<i>Center of tire</i>	96.6	33.2	196.1	65.4	96.6	2.2
	<i>Inner edge of tire</i>	75.9	26.9	156.7	52.2	75.9	2.7
	<i>Center between both tires</i>	17.8	6.0	36.0	12.0	17.8	9.8
Bottom AC Layer	<i>Outer edge of tire</i>	79.3	16.8	129.7	43.2	79.3	2.5
	<i>Center of tire</i>	85.5	19.0	142.6	47.5	85.5	2.3
	<i>Inner edge of tire</i>	73.0	19.5	131.4	43.8	73.0	2.7
	<i>Center between both tires</i>	15.1	4.6	29.0	9.7	15.1	11.5
2 inches Below Surface*	Center of tire*	96.6	33.2	196.1	65.4	96.6	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 64. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	34.0	-19.9	-25.9	-8.6	34.0	4.7
	<i>Center of tire</i>	31.1	-22.5	-36.5	-12.2	31.1	5.1
	<i>Inner edge of tire</i>	28.6	28.6	114.3	38.1	28.6	6.7
	<i>Center between both tires</i>	17.7	-2.6	9.7	3.2	17.7	9.5
2 inches Below Surface	<i>Outer edge of tire</i>	76.4	25.0	151.5	50.5	76.4	2.6
	<i>Center of tire</i>	96.5	36.8	206.7	68.9	96.5	2.2
	<i>Inner edge of tire</i>	72.8	27.5	155.4	51.8	72.8	2.8
	<i>Center between both tires</i>	16.4	5.0	31.4	10.5	16.4	10.6
Bottom AC Layer	<i>Outer edge of tire</i>	78.3	20.6	140.1	46.7	78.3	2.5
	<i>Center of tire</i>	79.9	22.1	146.0	48.7	79.9	2.5
	<i>Inner edge of tire</i>	73.0	23.5	143.5	47.8	73.0	2.7
	<i>Center between both tires</i>	12.7	1.3	16.6	5.5	12.7	13.4
2 inches Below Surface*	Center of tire*	96.5	36.8	206.7	68.9	96.5	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 65. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	50.8	-24.4	-22.4	-7.5	50.8	3.2
	<i>Center of tire</i>	42.4	-28.7	-43.7	-14.6	42.4	3.7
	<i>Inner edge of tire</i>	49.1	49.1	196.4	65.5	49.1	4.3
	<i>Center between both tires</i>	40.9	-5.7	24.0	8.0	40.9	4.2
2 inches Below Surface	<i>Outer edge of tire</i>	91.8	18.8	148.1	49.4	91.8	2.2
	<i>Center of tire</i>	103.2	28.5	188.7	62.9	103.2	2.0
	<i>Inner edge of tire</i>	86.1	21.5	150.5	50.2	86.1	2.3
	<i>Center between both tires</i>	22.0	9.0	49.1	16.4	22.0	8.1
Bottom AC Layer	<i>Outer edge of tire</i>	83.8	1.3	87.7	29.2	83.8	2.2
	<i>Center of tire</i>	107.0	-7.4	84.8	28.3	107.0	1.7
	<i>Inner edge of tire</i>	75.8	4.8	90.3	30.1	75.8	2.5
	<i>Center between both tires</i>	27.0	7.6	49.7	16.6	27.0	6.6
Bottom AC Layer*	Center of tire*	107.0	-7.4	84.8	28.3	107.0	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 66. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.0	-20.4	-18.1	-6.0	43.0	3.8
	<i>Center of tire</i>	37.5	-26.7	-42.6	-14.2	37.5	4.2
	<i>Inner edge of tire</i>	37.8	37.8	151.1	50.4	37.8	5.3
	<i>Center between both tires</i>	29.6	-3.9	17.8	5.9	29.6	5.8
2 inches Below Surface	<i>Outer edge of tire</i>	84.2	21.7	149.3	49.8	84.2	2.4
	<i>Center of tire</i>	99.3	33.2	198.8	66.3	99.3	2.1
	<i>Inner edge of tire</i>	79.5	25.0	154.6	51.5	79.5	2.5
	<i>Center between both tires</i>	19.6	7.4	41.7	13.9	19.6	9.0
Bottom AC Layer	<i>Outer edge of tire</i>	80.7	11.5	115.3	38.4	80.7	2.4
	<i>Center of tire</i>	92.5	9.9	122.2	40.7	92.5	2.1
	<i>Inner edge of tire</i>	73.5	14.5	117.1	39.0	73.5	2.6
	<i>Center between both tires</i>	18.8	6.3	37.9	12.6	18.8	9.3
Bottom AC Layer*	Center of tire*	92.5	9.9	122.2	40.7	92.5	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 67. 3D-Move Responses for RTS Pavement Under Bombardier CRJ 200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	37.4	-20.1	-22.9	-7.6	37.4	4.3
	<i>Center of tire</i>	33.7	-24.3	-39.2	-13.1	33.7	4.7
	<i>Inner edge of tire</i>	30.5	30.5	122.1	40.7	30.5	6.4
	<i>Center between both tires</i>	22.2	-3.1	12.9	4.3	22.2	7.6
2 inches Below Surface	<i>Outer edge of tire</i>	79.4	24.4	152.6	50.9	79.4	2.5
	<i>Center of tire</i>	97.8	37.0	208.8	69.6	97.8	2.2
	<i>Inner edge of tire</i>	75.4	27.2	157.1	52.4	75.4	2.7
	<i>Center between both tires</i>	17.7	6.0	35.7	11.9	17.7	9.8
Bottom AC Layer	<i>Outer edge of tire</i>	79.2	17.5	131.8	43.9	79.2	2.5
	<i>Center of tire</i>	84.1	17.9	137.9	46.0	84.1	2.3
	<i>Inner edge of tire</i>	73.0	20.2	133.5	44.5	73.0	2.7
	<i>Center between both tires</i>	14.7	1.5	19.3	6.4	14.7	11.6
2 inches Below Surface*	Center of tire*	97.8	37.0	208.8	69.6	97.8	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Gulfstream G600 Aircraft

Table 68. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	47.1	-21.5	-17.4	-5.8	47.1	3.4
	<i>Center of tire</i>	41.6	-31.8	-53.6	-17.9	41.6	3.7
	<i>Inner edge of tire</i>	40.4	40.4	161.5	53.8	40.4	5.0
	<i>Center between both tires</i>	38.8	-2.5	31.4	10.5	38.8	4.5
2 inches Below Surface	<i>Outer edge of tire</i>	94.7	29.4	183.0	61.0	94.7	2.2
	<i>Center of tire</i>	113.5	45.2	249.2	83.1	113.5	2.0
	<i>Inner edge of tire</i>	87.2	32.6	185.0	61.7	87.2	2.4
	<i>Center between both tires</i>	31.5	11.1	64.7	21.6	31.5	5.8
Bottom AC Layer	<i>Outer edge of tire</i>	101.4	20.7	163.3	54.4	101.4	2.0
	<i>Center of tire</i>	107.8	18.2	162.4	54.1	107.8	1.9
	<i>Inner edge of tire</i>	88.7	22.7	156.9	52.3	88.7	2.3
	<i>Center between both tires</i>	25.9	8.1	50.1	16.7	25.9	6.9
Bottom AC Layer*	Center of tire*	107.8	18.2	162.4	54.1	107.8	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 69. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.0	-20.1	-20.2	-6.7	40.0	4.0
	<i>Center of tire</i>	35.8	-27.1	-45.5	-15.2	35.8	4.4
	<i>Inner edge of tire</i>	31.7	31.7	126.9	42.3	31.7	6.1
	<i>Center between both tires</i>	29.9	-1.3	25.9	8.6	29.9	5.8
2 inches Below Surface	<i>Outer edge of tire</i>	89.8	32.2	186.3	62.1	89.8	2.3
	<i>Center of tire</i>	110.1	45.0	245.1	81.7	110.1	2.0
	<i>Inner edge of tire</i>	83.1	35.0	188.2	62.7	83.1	2.5
	<i>Center between both tires</i>	28.7	9.1	56.1	18.7	28.7	6.2
Bottom AC Layer	<i>Outer edge of tire</i>	99.7	25.3	175.6	58.5	99.7	2.1
	<i>Center of tire</i>	103.5	28.6	189.3	63.1	103.5	2.0
	<i>Inner edge of tire</i>	88.9	27.3	170.8	56.9	88.9	2.3
	<i>Center between both tires</i>	21.4	2.4	28.4	9.5	21.4	8.1
2 inches Below Surface*	Center of tire*	110.1	45.0	245.1	81.7	110.1	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 70. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	35.4	-19.1	-21.9	-7.3	35.4	4.6
	<i>Center of tire</i>	63.1	134.7	467.3	155.8	63.1	4.3
	<i>Inner edge of tire</i>	27.6	27.6	110.3	36.8	27.6	6.9
	<i>Center between both tires</i>	24.3	-0.9	21.5	7.2	24.3	7.1
2 inches Below Surface	<i>Outer edge of tire</i>	86.4	32.4	183.6	61.2	86.4	2.4
	<i>Center of tire</i>	110.6	51.0	263.7	87.9	110.6	2.0
	<i>Inner edge of tire</i>	80.8	36.7	191.0	63.7	80.8	2.6
	<i>Center between both tires</i>	26.9	7.8	50.1	16.7	26.9	6.6
Bottom AC Layer	<i>Outer edge of tire</i>	98.5	28.0	182.4	60.8	98.5	2.1
	<i>Center of tire</i>	99.4	29.2	187.0	62.3	99.4	2.1
	<i>Inner edge of tire</i>	88.7	28.8	175.0	58.3	88.7	2.3
	<i>Center between both tires</i>	19.0	4.1	31.2	10.4	19.0	9.1
2 inches Below Surface*	Center of tire*	110.6	51.0	263.7	87.9	110.6	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 71. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	54.4	-27.8	-29.0	-9.7	54.4	2.9
	<i>Center of tire</i>	47.6	-35.9	-60.2	-20.1	47.6	3.2
	<i>Inner edge of tire</i>	50.5	50.5	201.9	67.3	50.5	4.2
	<i>Center between both tires</i>	49.5	-3.7	38.4	12.8	49.5	3.5
2 inches Below Surface	<i>Outer edge of tire</i>	101.2	28.1	185.5	61.8	101.2	2.1
	<i>Center of tire</i>	115.5	38.8	231.9	77.3	115.5	1.9
	<i>Inner edge of tire</i>	92.3	29.3	180.3	60.1	92.3	2.2
	<i>Center between both tires</i>	34.4	13.2	74.1	24.7	34.4	5.3
Bottom AC Layer	<i>Outer edge of tire</i>	103.0	14.4	146.1	48.7	103.0	1.9
	<i>Center of tire</i>	117.9	13.5	158.3	52.8	117.9	1.7
	<i>Inner edge of tire</i>	89.5	18.7	145.7	48.6	89.5	2.2
	<i>Center between both tires</i>	31.8	11.1	65.1	21.7	31.8	5.7
Bottom AC Layer*	Center of tire*	117.9	13.5	158.3	52.8	117.9	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 72. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.6	-21.0	-17.6	-5.9	45.6	3.6
	<i>Center of tire</i>	40.3	-30.6	-51.4	-17.1	40.3	3.8
	<i>Inner edge of tire</i>	38.5	38.5	153.8	51.3	38.5	5.2
	<i>Center between both tires</i>	37.0	-2.2	30.3	10.1	37.0	4.7
2 inches Below Surface	<i>Outer edge of tire</i>	93.5	29.7	182.5	60.8	93.5	2.2
	<i>Center of tire</i>	112.8	45.2	248.4	82.8	112.8	2.0
	<i>Inner edge of tire</i>	86.1	32.7	184.2	61.4	86.1	2.4
	<i>Center between both tires</i>	30.9	10.7	63.1	21.0	30.9	5.8
Bottom AC Layer	<i>Outer edge of tire</i>	101.0	21.5	165.4	55.1	101.0	2.0
	<i>Center of tire</i>	106.8	20.6	168.7	56.2	106.8	1.9
	<i>Inner edge of tire</i>	88.7	23.4	158.9	53.0	88.7	2.3
	<i>Center between both tires</i>	25.0	7.7	48.2	16.1	25.0	7.1
Bottom AC Layer*	Center of tire*	106.8	20.6	168.7	56.2	106.8	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 73. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.2	-19.8	-20.2	-6.7	39.2	4.1
	<i>Center of tire</i>	35.0	-26.4	-44.1	-14.7	35.0	4.5
	<i>Inner edge of tire</i>	30.7	30.7	122.9	41.0	30.7	6.3
	<i>Center between both tires</i>	28.9	-1.2	25.3	8.4	28.9	5.9
2 inches Below Surface	<i>Outer edge of tire</i>	89.2	32.3	186.0	62.0	89.2	2.3
	<i>Center of tire</i>	109.7	45.0	244.6	81.5	109.7	2.0
	<i>Inner edge of tire</i>	82.6	35.0	187.7	62.6	82.6	2.5
	<i>Center between both tires</i>	28.4	8.9	55.2	18.4	28.4	6.3
Bottom AC Layer	<i>Outer edge of tire</i>	99.5	25.7	176.5	58.8	99.5	2.1
	<i>Center of tire</i>	101.1	24.5	174.5	58.2	101.1	2.0
	<i>Inner edge of tire</i>	88.9	27.6	171.7	57.2	88.9	2.3
	<i>Center between both tires</i>	20.9	2.4	28.1	9.4	20.9	8.3
2 inches Below Surface*	Center of tire*	109.7	45.0	244.6	81.5	109.7	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 74. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	65.8	-29.3	-22.0	-7.3	65.8	2.5
	<i>Center of tire</i>	54.7	-40.0	-65.4	-21.8	54.7	2.8
	<i>Inner edge of tire</i>	64.4	64.4	257.7	85.9	64.4	3.5
	<i>Center between both tires</i>	65.2	-5.1	49.8	16.6	65.2	2.7
2 inches Below Surface	<i>Outer edge of tire</i>	109.3	23.7	180.5	60.2	109.3	1.9
	<i>Center of tire</i>	122.6	38.7	238.8	79.6	122.6	1.8
	<i>Inner edge of tire</i>	100.5	28.2	185.1	61.7	100.5	2.1
	<i>Center between both tires</i>	38.3	15.9	86.2	28.7	38.3	4.8
Bottom AC Layer	<i>Outer edge of tire</i>	106.4	6.7	126.4	42.1	106.4	1.8
	<i>Center of tire</i>	131.1	-2.7	123.1	41.0	131.1	1.5
	<i>Inner edge of tire</i>	91.5	12.3	128.5	42.8	91.5	2.1
	<i>Center between both tires</i>	41.8	13.5	82.4	27.5	41.8	4.4
Bottom AC Layer*	Center of tire*	131.1	-2.7	123.1	41.0	131.1	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 75. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	52.6	-27.1	-28.8	-9.6	52.6	3.0
	<i>Center of tire</i>	46.1	-34.6	-57.8	-19.3	46.1	3.3
	<i>Inner edge of tire</i>	48.3	48.3	193.1	64.4	48.3	4.3
	<i>Center between both tires</i>	47.6	-3.0	38.7	12.9	47.6	3.7
2 inches Below Surface	<i>Outer edge of tire</i>	99.7	28.7	185.7	61.9	99.7	2.1
	<i>Center of tire</i>	114.6	38.9	231.2	77.1	114.6	1.9
	<i>Inner edge of tire</i>	90.9	29.8	180.2	60.1	90.9	2.3
	<i>Center between both tires</i>	34.1	12.9	72.9	24.3	34.1	5.4
Bottom AC Layer	<i>Outer edge of tire</i>	102.7	15.8	150.0	50.0	102.7	2.0
	<i>Center of tire</i>	114.6	13.2	154.3	51.4	114.6	1.8
	<i>Inner edge of tire</i>	89.4	20.0	149.3	49.8	89.4	2.2
	<i>Center between both tires</i>	30.5	10.3	61.3	20.4	30.5	5.9
Bottom AC Layer*	Center of tire*	114.6	13.2	154.3	51.4	114.6	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 76. 3D-Move Responses for RTS Pavement Under Gulfstream G600 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.6	-20.6	-17.2	-5.7	44.6	3.6
	<i>Center of tire</i>	39.4	-29.7	-49.8	-16.6	39.4	3.9
	<i>Inner edge of tire</i>	37.4	37.4	149.4	49.8	37.4	5.4
	<i>Center between both tires</i>	36.2	-1.7	31.1	10.4	36.2	4.8
2 inches Below Surface	<i>Outer edge of tire</i>	92.7	30.0	182.7	60.9	92.7	2.2
	<i>Center of tire</i>	112.5	45.3	248.4	82.8	112.5	2.0
	<i>Inner edge of tire</i>	85.5	33.0	184.3	61.4	85.5	2.4
	<i>Center between both tires</i>	30.8	10.6	62.7	20.9	30.8	5.9
Bottom AC Layer	<i>Outer edge of tire</i>	100.8	22.2	167.6	55.9	100.8	2.0
	<i>Center of tire</i>	106.5	22.4	173.6	57.9	106.5	1.9
	<i>Inner edge of tire</i>	88.7	24.1	161.1	53.7	88.7	2.3
	<i>Center between both tires</i>	24.3	2.7	32.4	10.8	24.3	7.2
Bottom AC Layer*	Center of tire*	106.5	22.4	173.6	57.9	106.5	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

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Table 77. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	49.7	-22.9	-19.1	-6.4	49.7	3.3
	<i>Center of tire</i>	48.1	-36.4	-61.1	-20.4	48.1	3.2
	<i>Inner edge of tire</i>	41.9	41.9	167.5	55.8	41.9	4.9
	<i>Center between both tires</i>	31.1	0.4	32.3	10.8	31.1	5.6
2 inches Below Surface	<i>Outer edge of tire</i>	102.9	34.8	207.3	69.1	102.9	2.1
	<i>Center of tire</i>	121.6	51.3	275.4	91.8	121.6	1.9
	<i>Inner edge of tire</i>	102.7	35.0	207.8	69.3	102.7	2.1
	<i>Center between both tires</i>	17.4	1.5	21.9	7.3	17.4	9.8
Bottom AC Layer	<i>Outer edge of tire</i>	115.9	21.8	181.4	60.5	115.9	1.8
	<i>Center of tire</i>	125.1	22.6	192.7	64.2	125.1	1.7
	<i>Inner edge of tire</i>	115.5	22.4	182.7	60.9	115.5	1.8
	<i>Center between both tires</i>	10.1	1.8	15.5	5.2	10.1	16.8
Bottom AC Layer*	Center of tire*	125.1	22.6	192.7	64.2	125.1	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 78. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.8	-20.6	-20.9	-7.0	40.8	4.0
	<i>Center of tire</i>	39.6	-29.2	-48.2	-16.1	39.6	3.9
	<i>Inner edge of tire</i>	35.2	35.2	140.8	46.9	35.2	5.6
	<i>Center between both tires</i>	23.8	2.1	30.1	10.0	23.8	7.3
2 inches Below Surface	<i>Outer edge of tire</i>	96.2	35.1	201.5	67.2	96.2	2.2
	<i>Center of tire</i>	116.7	51.3	270.6	90.2	116.7	1.9
	<i>Inner edge of tire</i>	97.2	38.3	212.1	70.7	97.2	2.2
	<i>Center between both tires</i>	14.2	1.2	17.9	6.0	14.2	12.0
Bottom AC Layer	<i>Outer edge of tire</i>	113.2	25.1	188.7	62.9	113.2	1.8
	<i>Center of tire</i>	117.1	24.7	191.4	63.8	117.1	1.8
	<i>Inner edge of tire</i>	113.9	27.5	196.5	65.5	113.9	1.8
	<i>Center between both tires</i>	8.2	1.7	13.3	4.4	8.2	20.6
Bottom AC Layer*	Center of tire*	117.1	24.7	191.4	63.8	117.1	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 79. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	35.0	-18.9	-21.8	-7.3	35.0	4.6
	<i>Center of tire</i>	67.6	145.6	504.4	168.1	67.6	4.1
	<i>Inner edge of tire</i>	30.8	30.8	123.2	41.1	30.8	6.3
	<i>Center between both tires</i>	18.9	3.1	28.3	9.4	18.9	9.2
2 inches Below Surface	<i>Outer edge of tire</i>	93.0	38.0	207.1	69.0	93.0	2.3
	<i>Center of tire</i>	117.7	60.9	300.5	100.2	117.7	2.0
	<i>Inner edge of tire</i>	93.2	38.1	207.4	69.1	93.2	2.3
	<i>Center between both tires</i>	11.8	1.2	15.4	5.1	11.8	14.4
Bottom AC Layer	<i>Outer edge of tire</i>	111.9	29.0	199.0	66.3	111.9	1.9
	<i>Center of tire</i>	114.7	30.2	205.3	68.4	114.7	1.9
	<i>Inner edge of tire</i>	112.0	29.2	199.7	66.6	112.0	1.9
	<i>Center between both tires</i>	7.0	1.8	12.4	4.1	7.0	24.1
Bottom AC Layer*	Center of tire*	114.7	30.2	205.3	68.4	114.7	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 80. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	58.8	-30.3	-32.1	-10.7	58.8	2.7
	<i>Center of tire</i>	57.1	-43.5	-73.3	-24.4	57.1	2.6
	<i>Inner edge of tire</i>	53.7	53.7	214.7	71.6	53.7	4.0
	<i>Center between both tires</i>	39.3	-1.6	34.6	11.5	39.3	4.4
2 inches Below Surface	<i>Outer edge of tire</i>	109.5	30.3	200.3	66.8	109.5	1.9
	<i>Center of tire</i>	122.9	41.5	247.4	82.5	122.9	1.8
	<i>Inner edge of tire</i>	109.1	30.7	201.2	67.1	109.1	1.9
	<i>Center between both tires</i>	20.7	1.9	26.5	8.8	20.7	8.3
Bottom AC Layer	<i>Outer edge of tire</i>	118.6	17.5	171.0	57.0	118.6	1.7
	<i>Center of tire</i>	134.4	16.2	182.9	61.0	134.4	1.5
	<i>Inner edge of tire</i>	117.8	18.3	172.7	57.6	117.8	1.7
	<i>Center between both tires</i>	12.2	1.7	17.2	5.7	12.2	13.9
Bottom AC Layer*	Center of tire*	134.4	16.2	182.9	61.0	134.4	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 81. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	47.8	-22.3	-19.0	-6.3	47.8	3.4
	<i>Center of tire</i>	46.1	-34.6	-57.7	-19.2	46.1	3.3
	<i>Inner edge of tire</i>	40.5	40.5	161.9	54.0	40.5	5.0
	<i>Center between both tires</i>	29.6	0.8	31.9	10.6	29.6	5.9
2 inches Below Surface	<i>Outer edge of tire</i>	101.4	34.9	206.3	68.8	101.4	2.1
	<i>Center of tire</i>	120.6	51.3	274.5	91.5	120.6	1.9
	<i>Inner edge of tire</i>	101.3	35.2	206.8	68.9	101.3	2.1
	<i>Center between both tires</i>	16.8	1.5	21.2	7.1	16.8	10.2
Bottom AC Layer	<i>Outer edge of tire</i>	115.4	22.6	183.3	61.1	115.4	1.8
	<i>Center of tire</i>	124.1	25.0	198.9	66.3	124.1	1.7
	<i>Inner edge of tire</i>	115.0	23.1	184.4	61.5	115.0	1.8
	<i>Center between both tires</i>	9.7	1.8	15.1	5.0	9.7	17.5
Bottom AC Layer*	Center of tire*	124.1	25.0	198.9	66.3	124.1	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 82. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.8	-20.2	-20.7	-6.9	39.8	4.1
	<i>Center of tire</i>	38.5	-28.2	-46.1	-15.4	38.5	4.1
	<i>Inner edge of tire</i>	34.4	34.4	137.7	45.9	34.4	5.7
	<i>Center between both tires</i>	23.0	2.3	29.8	9.9	23.0	7.5
2 inches Below Surface	<i>Outer edge of tire</i>	95.4	35.1	200.8	66.9	95.4	2.2
	<i>Center of tire</i>	116.1	51.4	270.2	90.1	116.1	2.0
	<i>Inner edge of tire</i>	96.5	38.3	211.4	70.5	96.5	2.2
	<i>Center between both tires</i>	13.8	1.2	17.6	5.9	13.8	12.3
Bottom AC Layer	<i>Outer edge of tire</i>	112.9	25.5	189.5	63.2	112.9	1.9
	<i>Center of tire</i>	116.8	25.8	194.3	64.8	116.8	1.8
	<i>Inner edge of tire</i>	113.6	27.9	197.2	65.7	113.6	1.9
	<i>Center between both tires</i>	8.0	1.9	13.6	4.5	8.0	21.1
Bottom AC Layer*	Center of tire*	116.8	25.8	194.3	64.8	116.8	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 83. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	72.8	-33.3	-27.0	-9.0	72.8	2.2
	<i>Center of tire</i>	68.1	-51.4	-86.0	-28.7	68.1	2.2
	<i>Inner edge of tire</i>	70.6	70.6	282.5	94.2	70.6	3.3
	<i>Center between both tires</i>	51.1	-3.8	39.7	13.2	51.1	3.4
2 inches Below Surface	<i>Outer edge of tire</i>	120.1	28.7	206.2	68.7	120.1	1.8
	<i>Center of tire</i>	134.7	51.7	289.7	96.6	134.7	1.7
	<i>Inner edge of tire</i>	119.5	29.4	207.7	69.2	119.5	1.8
	<i>Center between both tires</i>	24.9	2.9	33.6	11.2	24.9	7.0
Bottom AC Layer	<i>Outer edge of tire</i>	122.1	10.8	154.4	51.5	122.1	1.6
	<i>Center of tire</i>	148.5	1.9	154.3	51.4	148.5	1.4
	<i>Inner edge of tire</i>	120.6	12.1	156.9	52.3	120.6	1.7
	<i>Center between both tires</i>	15.3	1.3	19.2	6.4	15.3	11.1
Bottom AC Layer*	Center of tire*	148.5	1.9	154.3	51.4	148.5	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 84. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	56.5	-29.3	-31.4	-10.5	56.5	2.8
	<i>Center of tire</i>	54.9	-41.5	-69.6	-23.2	54.9	2.7
	<i>Inner edge of tire</i>	52.5	52.5	209.9	70.0	52.5	4.1
	<i>Center between both tires</i>	38.0	-0.7	35.8	11.9	38.0	4.6
2 inches Below Surface	<i>Outer edge of tire</i>	107.7	30.8	200.0	66.7	107.7	2.0
	<i>Center of tire</i>	126.1	51.5	280.5	93.5	126.1	1.8
	<i>Inner edge of tire</i>	107.3	31.2	200.8	66.9	107.3	2.0
	<i>Center between both tires</i>	20.4	2.0	26.3	8.8	20.4	8.5
Bottom AC Layer	<i>Outer edge of tire</i>	118.2	18.8	174.5	58.2	118.2	1.7
	<i>Center of tire</i>	132.9	19.8	192.3	64.1	132.9	1.6
	<i>Inner edge of tire</i>	117.4	19.6	176.2	58.7	117.4	1.8
	<i>Center between both tires</i>	12.0	1.7	17.1	5.7	12.0	14.2
Bottom AC Layer*	Center of tire*	132.9	19.8	192.3	64.1	132.9	1.6

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 85. 3D-Move Responses for RTS Pavement Under Boeing 737 MAX 8 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	46.6	-21.7	-18.5	-6.2	46.6	3.5
	<i>Center of tire</i>	45.0	-33.5	-55.6	-18.5	45.0	3.4
	<i>Inner edge of tire</i>	39.5	39.5	158.1	52.7	39.5	5.1
	<i>Center between both tires</i>	28.9	1.1	32.2	10.7	28.9	6.0
2 inches Below Surface	<i>Outer edge of tire</i>	100.5	35.2	206.0	68.7	100.5	2.1
	<i>Center of tire</i>	120.2	51.3	274.3	91.4	120.2	1.9
	<i>Inner edge of tire</i>	100.4	35.4	206.6	68.9	100.4	2.1
	<i>Center between both tires</i>	16.6	1.5	21.2	7.1	16.6	10.3
Bottom AC Layer	<i>Outer edge of tire</i>	115.2	23.3	185.2	61.7	115.2	1.8
	<i>Center of tire</i>	123.8	26.6	203.6	67.9	123.8	1.7
	<i>Inner edge of tire</i>	114.8	23.8	186.3	62.1	114.8	1.8
	<i>Center between both tires</i>	9.6	1.8	15.1	5.0	9.6	17.6
Bottom AC Layer*	Center of tire*	123.8	26.6	203.6	67.9	123.8	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Boeing 777-200 Aircraft

Table 86. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.0	-23.0	-26.1	-8.7	43.0	3.7
	<i>Center of tire</i>	48.3	-27.2	-33.3	-11.1	48.3	3.3
	<i>Inner edge of tire</i>	41.0	41.0	164.0	54.7	41.0	5.0
	<i>Center between both tires</i>	16.7	-9.9	-13.1	-4.4	16.7	9.8
2 inches Below Surface	<i>Outer edge of tire</i>	91.1	30.5	182.6	60.9	91.1	2.3
	<i>Center of tire</i>	109.4	50.9	262.2	87.4	109.4	2.1
	<i>Inner edge of tire</i>	91.3	30.3	182.3	60.8	91.3	2.3
	<i>Center between both tires</i>	9.5	-3.7	-1.5	-0.5	9.5	17.6
Bottom AC Layer	<i>Outer edge of tire</i>	105.0	21.3	169.0	56.3	105.0	1.9
	<i>Center of tire</i>	112.3	18.7	168.3	56.1	112.3	1.8
	<i>Inner edge of tire</i>	105.4	21.2	169.0	56.3	105.4	1.9
	<i>Center between both tires</i>	5.6	-1.2	1.9	0.6	5.6	29.9
Bottom AC Layer*	Center of tire*	112.3	18.7	168.3	56.1	112.3	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 87. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	35.0	-20.2	-25.6	-8.5	35.0	4.6
	<i>Center of tire</i>	39.7	-20.6	-22.1	-7.4	39.7	4.1
	<i>Inner edge of tire</i>	33.5	33.5	134.1	44.7	33.5	5.9
	<i>Center between both tires</i>	13.4	-8.7	-12.6	-4.2	13.4	12.2
2 inches Below Surface	<i>Outer edge of tire</i>	85.8	33.8	187.2	62.4	85.8	2.4
	<i>Center of tire</i>	105.5	51.1	258.9	86.3	105.5	2.1
	<i>Inner edge of tire</i>	86.1	33.6	187.0	62.3	86.1	2.4
	<i>Center between both tires</i>	7.7	-3.1	-1.7	-0.6	7.7	21.6
Bottom AC Layer	<i>Outer edge of tire</i>	102.3	24.1	174.6	58.2	102.3	2.0
	<i>Center of tire</i>	108.1	27.1	189.5	63.2	108.1	1.9
	<i>Inner edge of tire</i>	102.7	23.9	174.5	58.2	102.7	2.0
	<i>Center between both tires</i>	4.8	-1.3	1.0	0.3	4.8	34.8
Bottom AC Layer*	Center of tire*	108.1	27.1	189.5	63.2	108.1	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 88. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	29.8	-18.3	-25.1	-8.4	29.8	5.4
	<i>Center of tire</i>	60.3	128.0	444.2	148.1	60.3	4.4
	<i>Inner edge of tire</i>	28.5	28.5	114.1	38.0	28.5	6.7
	<i>Center between both tires</i>	11.2	-7.8	-12.1	-4.0	11.2	14.6
2 inches Below Surface	<i>Outer edge of tire</i>	81.9	33.3	181.7	60.6	81.9	2.5
	<i>Center of tire</i>	102.8	51.4	257.1	85.7	102.8	2.2
	<i>Inner edge of tire</i>	83.0	36.0	190.9	63.6	83.0	2.5
	<i>Center between both tires</i>	6.4	-2.7	-1.7	-0.6	6.4	25.8
Bottom AC Layer	<i>Outer edge of tire</i>	100.3	25.6	177.2	59.1	100.3	2.1
	<i>Center of tire</i>	102.1	24.1	174.3	58.1	102.1	2.0
	<i>Inner edge of tire</i>	101.3	27.1	182.5	60.8	101.3	2.1
	<i>Center between both tires</i>	4.2	-1.2	0.6	0.2	4.2	39.9
Bottom AC Layer*	Center of tire*	102.1	24.1	174.3	58.1	102.1	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 89. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	51.9	-25.6	-25.0	-8.3	51.9	3.1
	<i>Center of tire</i>	54.0	-47.2	-87.4	-29.1	54.0	2.7
	<i>Inner edge of tire</i>	49.5	49.5	197.8	65.9	49.5	4.3
	<i>Center between both tires</i>	20.3	-11.3	-13.5	-4.5	20.3	8.0
2 inches Below Surface	<i>Outer edge of tire</i>	98.3	29.9	187.9	62.6	98.3	2.1
	<i>Center of tire</i>	113.7	51.0	266.6	88.9	113.7	2.0
	<i>Inner edge of tire</i>	98.5	29.7	187.6	62.5	98.5	2.1
	<i>Center between both tires</i>	11.3	-4.1	-1.1	-0.4	11.3	14.7
Bottom AC Layer	<i>Outer edge of tire</i>	107.6	17.7	160.8	53.6	107.6	1.9
	<i>Center of tire</i>	121.1	14.0	163.0	54.3	121.1	1.7
	<i>Inner edge of tire</i>	108.0	17.6	160.7	53.6	108.0	1.9
	<i>Center between both tires</i>	6.3	-1.1	3.0	1.0	6.3	26.6
Bottom AC Layer*	Center of tire*	121.1	14.0	163.0	54.3	121.1	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 90. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.3	-22.3	-25.5	-8.5	41.3	3.9
	<i>Center of tire</i>	46.3	-25.6	-30.5	-10.2	46.3	3.4
	<i>Inner edge of tire</i>	39.4	39.4	157.6	52.5	39.4	5.1
	<i>Center between both tires</i>	16.0	-9.6	-12.9	-4.3	16.0	10.2
2 inches Below Surface	<i>Outer edge of tire</i>	89.8	30.6	181.6	60.5	89.8	2.3
	<i>Center of tire</i>	108.6	51.0	261.6	87.2	108.6	2.1
	<i>Inner edge of tire</i>	90.0	30.4	181.3	60.4	90.0	2.3
	<i>Center between both tires</i>	9.1	-3.5	-1.5	-0.5	9.1	18.2
Bottom AC Layer	<i>Outer edge of tire</i>	104.5	22.0	170.4	56.8	104.5	2.0
	<i>Center of tire</i>	111.4	20.6	173.3	57.8	111.4	1.8
	<i>Inner edge of tire</i>	104.9	21.8	170.4	56.8	104.9	2.0
	<i>Center between both tires</i>	5.4	-1.2	1.7	0.6	5.4	30.7
Bottom AC Layer*	Center of tire*	111.4	20.6	173.3	57.8	111.4	1.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 91. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	34.1	-19.8	-25.2	-8.4	34.1	4.7
	<i>Center of tire</i>	38.5	-19.6	-20.4	-6.8	38.5	4.2
	<i>Inner edge of tire</i>	32.6	32.6	130.5	43.5	32.6	6.0
	<i>Center between both tires</i>	13.1	-8.5	-12.4	-4.1	13.1	12.5
2 inches Below Surface	<i>Outer edge of tire</i>	85.1	33.8	186.5	62.2	85.1	2.5
	<i>Center of tire</i>	105.0	51.2	258.7	86.2	105.0	2.1
	<i>Inner edge of tire</i>	85.4	33.6	186.3	62.1	85.4	2.4
	<i>Center between both tires</i>	7.5	-3.1	-1.7	-0.6	7.5	22.2
Bottom AC Layer	<i>Outer edge of tire</i>	102.0	24.4	175.2	58.4	102.0	2.0
	<i>Center of tire</i>	107.7	28.2	192.3	64.1	107.7	1.9
	<i>Inner edge of tire</i>	102.4	24.3	175.2	58.4	102.4	2.0
	<i>Center between both tires</i>	4.7	-1.2	0.9	0.3	4.7	35.5
Bottom AC Layer*	Center of tire*	107.7	28.2	192.3	64.1	107.7	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 92. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	64.0	-28.4	-21.3	-7.1	64.0	2.5
	<i>Center of tire</i>	66.2	-56.7	-104.0	-34.7	66.2	2.2
	<i>Inner edge of tire</i>	61.0	61.0	243.9	81.3	61.0	3.6
	<i>Center between both tires</i>	25.4	-13.0	-13.7	-4.6	25.4	6.4
2 inches Below Surface	<i>Outer edge of tire</i>	106.7	25.1	182.0	60.7	106.7	1.9
	<i>Center of tire</i>	119.7	51.1	273.1	91.0	119.7	1.9
	<i>Inner edge of tire</i>	106.9	24.9	181.6	60.5	106.9	1.9
	<i>Center between both tires</i>	13.7	-4.5	0.2	0.1	13.7	12.2
Bottom AC Layer	<i>Outer edge of tire</i>	109.5	8.6	135.4	45.1	109.5	1.8
	<i>Center of tire</i>	133.7	2.5	141.2	47.1	133.7	1.5
	<i>Inner edge of tire</i>	111.0	10.9	143.7	47.9	111.0	1.8
	<i>Center between both tires</i>	7.1	-0.7	5.0	1.7	7.1	23.8
Bottom AC Layer*	Center of tire*	133.7	2.5	141.2	47.1	133.7	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 93. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	49.9	-24.7	-24.2	-8.1	49.9	3.2
	<i>Center of tire</i>	52.0	-44.7	-81.9	-27.3	52.0	2.8
	<i>Inner edge of tire</i>	47.5	47.5	190.2	63.4	47.5	4.4
	<i>Center between both tires</i>	19.7	-11.0	-13.2	-4.4	19.7	8.3
2 inches Below Surface	<i>Outer edge of tire</i>	96.6	30.2	187.4	62.5	96.6	2.2
	<i>Center of tire</i>	112.9	51.0	266.0	88.7	112.9	2.0
	<i>Inner edge of tire</i>	96.9	30.1	187.0	62.3	96.9	2.2
	<i>Center between both tires</i>	11.0	-4.0	-0.9	-0.3	11.0	15.1
Bottom AC Layer	<i>Outer edge of tire</i>	107.2	18.8	163.6	54.5	107.2	1.9
	<i>Center of tire</i>	119.9	16.9	170.6	56.9	119.9	1.7
	<i>Inner edge of tire</i>	107.6	18.7	163.6	54.5	107.6	1.9
	<i>Center between both tires</i>	6.2	-1.1	3.0	1.0	6.2	26.8
Bottom AC Layer*	Center of tire*	119.9	16.9	170.6	56.9	119.9	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 94. 3D-Move Responses for RTS Pavement Under Boeing 777-200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.2	-21.6	-24.7	-8.2	40.2	4.0
	<i>Center of tire</i>	45.1	-24.6	-28.6	-9.5	45.1	3.5
	<i>Inner edge of tire</i>	38.4	38.4	153.6	51.2	38.4	5.2
	<i>Center between both tires</i>	15.7	-9.5	-12.8	-4.3	15.7	10.4
2 inches Below Surface	<i>Outer edge of tire</i>	88.9	30.8	181.3	60.4	88.9	2.3
	<i>Center of tire</i>	108.3	51.1	261.6	87.2	108.3	2.1
	<i>Inner edge of tire</i>	89.1	30.7	181.0	60.3	89.1	2.3
	<i>Center between both tires</i>	9.0	-3.4	-1.3	-0.4	9.0	18.5
Bottom AC Layer	<i>Outer edge of tire</i>	104.2	22.6	172.0	57.3	104.2	2.0
	<i>Center of tire</i>	111.3	22.0	177.1	59.0	111.3	1.9
	<i>Inner edge of tire</i>	104.6	22.5	172.0	57.3	104.6	2.0
	<i>Center between both tires</i>	5.4	-1.2	1.8	0.6	5.4	30.8
Bottom AC Layer*	Center of tire*	111.3	22.0	177.1	59.0	111.3	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

San Francisco International Airport (SFO)

Beechcraft King Air B200 Aircraft

Table 95. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 5 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	22.1	-14.0	-20.0	-6.7	22.1	7.3
	<i>Center of tire</i>	21.9	-4.4	8.7	2.9	21.9	7.7
	<i>Inner edge of tire</i>	20.4	20.4	81.4	27.1	20.4	9.1
	<i>Center between both tires</i>	7.3	-5.3	-8.6	-2.9	7.3	22.7
2 inches Below Surface	<i>Outer edge of tire</i>	46.2	11.8	81.7	27.2	46.2	4.0
	<i>Center of tire</i>	64.0	20.4	125.3	41.8	64.0	3.0
	<i>Inner edge of tire</i>	44.6	12.9	83.3	27.8	44.6	4.2
	<i>Center between both tires</i>	13.6	3.4	23.8	7.9	13.6	12.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.1	12.1	70.6	23.5	34.1	5.3
	<i>Center of tire</i>	33.5	15.5	80.1	26.7	33.5	5.5
	<i>Inner edge of tire</i>	30.9	13.7	72.0	24.0	30.9	5.9
	<i>Center between both tires</i>	9.0	1.4	13.3	4.4	9.0	18.8
Mid AC Layer 2	<i>Outer edge of tire</i>	10.9	-1.4	6.8	2.3	10.9	15.3
	<i>Center of tire</i>	10.7	-1.1	7.5	2.5	10.7	15.7
	<i>Inner edge of tire</i>	10.2	-1.0	7.1	2.4	10.2	16.5
	<i>Center between both tires</i>	9.8	-1.1	6.5	2.2	9.8	17.1
2 inches Below Surface*	Center of tire*	64.0	20.4	125.3	41.8	64.0	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 96. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.5	-16.1	-26.7	-8.9	21.5	7.4
	<i>Center of tire</i>	34.2	67.1	235.4	78.5	34.2	6.4
	<i>Inner edge of tire</i>	20.8	20.8	83.3	27.8	20.8	8.9
	<i>Center between both tires</i>	4.3	-6.1	-14.2	-4.7	4.3	38.4
2 inches Below Surface	<i>Outer edge of tire</i>	45.8	11.4	80.0	26.7	45.8	4.0
	<i>Center of tire</i>	67.7	19.7	126.9	42.3	67.7	2.9
	<i>Inner edge of tire</i>	44.5	12.2	81.1	27.0	44.5	4.1
	<i>Center between both tires</i>	13.6	1.9	19.2	6.4	13.6	12.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.1	15.3	79.9	26.6	34.1	5.4
	<i>Center of tire</i>	32.2	17.1	83.6	27.9	32.2	5.8
	<i>Inner edge of tire</i>	31.7	16.3	80.5	26.8	31.7	5.8
	<i>Center between both tires</i>	7.5	0.7	9.7	3.2	7.5	22.4
Mid AC Layer 2	<i>Outer edge of tire</i>	11.3	-1.1	8.0	2.7	11.3	14.9
	<i>Center of tire</i>	11.1	-0.8	8.7	2.9	11.1	15.2
	<i>Inner edge of tire</i>	10.5	-0.8	8.0	2.7	10.5	16.0
	<i>Center between both tires</i>	10.1	-1.0	7.2	2.4	10.1	16.7
2 inches Below Surface*	Center of tire*	67.7	19.7	126.9	42.3	67.7	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 97. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.7	-11.9	-14.0	-4.7	21.7	7.5
	<i>Center of tire</i>	36.5	64.7	230.7	76.9	36.5	6.0
	<i>Inner edge of tire</i>	20.9	20.9	83.6	27.9	20.9	8.9
	<i>Center between both tires</i>	4.1	-6.7	-16.0	-5.3	4.1	39.5
2 inches Below Surface	<i>Outer edge of tire</i>	45.7	11.2	79.4	26.5	45.7	4.0
	<i>Center of tire</i>	69.1	19.3	127.1	42.4	69.1	2.8
	<i>Inner edge of tire</i>	44.6	11.9	80.3	26.8	44.6	4.1
	<i>Center between both tires</i>	13.6	1.3	17.7	5.9	13.6	12.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.1	16.3	83.1	27.7	34.1	5.4
	<i>Center of tire</i>	32.0	17.6	84.8	28.3	32.0	5.8
	<i>Inner edge of tire</i>	32.0	17.1	83.3	27.8	32.0	5.8
	<i>Center between both tires</i>	6.8	0.5	8.2	2.7	6.8	24.7
Mid AC Layer 2	<i>Outer edge of tire</i>	11.5	-1.0	8.4	2.8	11.5	14.7
	<i>Center of tire</i>	11.2	-0.7	9.1	3.0	11.2	15.0
	<i>Inner edge of tire</i>	10.6	-0.8	8.3	2.8	10.6	15.8
	<i>Center between both tires</i>	10.2	-0.9	7.5	2.5	10.2	16.5
2 inches Below Surface*	Center of tire*	69.1	19.3	127.1	42.4	69.1	2.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 98. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 15 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	22.6	-12.7	-15.4	-5.1	22.6	7.2
	<i>Center of tire</i>	20.6	-13.0	-18.4	-6.1	20.6	7.9
	<i>Inner edge of tire</i>	20.2	20.2	81.0	27.0	20.2	9.1
	<i>Center between both tires</i>	9.8	-4.9	-4.9	-1.6	9.8	16.9
2 inches Below Surface	<i>Outer edge of tire</i>	46.7	12.0	82.6	27.5	46.7	4.0
	<i>Center of tire</i>	61.9	20.4	123.1	41.0	61.9	3.1
	<i>Inner edge of tire</i>	44.8	13.3	84.6	28.2	44.8	4.1
	<i>Center between both tires</i>	13.8	4.3	26.6	8.9	13.8	12.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.2	10.2	64.8	21.6	34.2	5.3
	<i>Center of tire</i>	35.0	14.5	78.5	26.2	35.0	5.3
	<i>Inner edge of tire</i>	30.6	11.9	66.2	22.1	30.6	5.9
	<i>Center between both tires</i>	9.8	2.1	16.1	5.4	9.8	17.4
Mid AC Layer 2	<i>Outer edge of tire</i>	10.8	-1.6	6.1	2.0	10.8	15.6
	<i>Center of tire</i>	10.6	-1.3	6.8	2.3	10.6	15.9
	<i>Inner edge of tire</i>	10.1	-1.2	6.6	2.2	10.1	16.6
	<i>Center between both tires</i>	9.7	-1.3	5.9	2.0	9.7	17.2
2 inches Below Surface*	Center of tire*	61.9	20.4	123.1	41.0	61.9	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 99. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 15 mph and 52° C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.7	-15.6	-25.2	-8.4	21.7	7.4
	<i>Center of tire</i>	32.4	68.7	238.5	79.5	32.4	6.8
	<i>Inner edge of tire</i>	20.7	20.7	82.9	27.6	20.7	8.9
	<i>Center between both tires</i>	4.7	-5.9	-13.0	-4.3	4.7	34.5
2 inches Below Surface	<i>Outer edge of tire</i>	45.9	11.5	80.4	26.8	45.9	4.0
	<i>Center of tire</i>	66.7	19.9	126.5	42.2	66.7	2.9
	<i>Inner edge of tire</i>	44.5	12.4	81.6	27.2	44.5	4.2
	<i>Center between both tires</i>	13.5	2.3	20.5	6.8	13.5	12.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.1	14.5	77.5	25.8	34.1	5.4
	<i>Center of tire</i>	32.5	17.1	83.9	28.0	32.5	5.7
	<i>Inner edge of tire</i>	31.5	15.6	78.3	26.1	31.5	5.9
	<i>Center between both tires</i>	8.0	0.8	10.4	3.5	8.0	21.2
Mid AC Layer 2	<i>Outer edge of tire</i>	11.2	-1.2	7.7	2.6	11.2	15.0
	<i>Center of tire</i>	11.0	-0.9	8.4	2.8	11.0	15.4
	<i>Inner edge of tire</i>	10.4	-0.9	7.8	2.6	10.4	16.2
	<i>Center between both tires</i>	10.0	-1.0	7.1	2.4	10.0	16.8
2 inches Below Surface*	Center of tire*	66.7	19.9	126.5	42.2	66.7	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 100. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.8	-11.8	-13.7	-4.6	21.8	7.5
	<i>Center of tire</i>	35.9	65.3	231.9	77.3	35.9	6.1
	<i>Inner edge of tire</i>	20.9	20.9	83.7	27.9	20.9	8.9
	<i>Center between both tires</i>	4.1	-6.5	-15.5	-5.2	4.1	39.7
2 inches Below Surface	<i>Outer edge of tire</i>	45.8	11.3	79.6	26.5	45.8	4.0
	<i>Center of tire</i>	68.7	19.5	127.1	42.4	68.7	2.8
	<i>Inner edge of tire</i>	44.6	12.0	80.5	26.8	44.6	4.1
	<i>Center between both tires</i>	13.6	1.5	18.1	6.0	13.6	12.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.1	16.0	82.2	27.4	34.1	5.4
	<i>Center of tire</i>	32.0	17.0	83.1	27.7	32.0	5.8
	<i>Inner edge of tire</i>	31.9	16.9	82.6	27.5	31.9	5.8
	<i>Center between both tires</i>	7.0	0.5	8.5	2.8	7.0	24.0
Mid AC Layer 2	<i>Outer edge of tire</i>	11.4	-1.0	8.3	2.8	11.4	14.7
	<i>Center of tire</i>	11.2	-0.7	9.0	3.0	11.2	15.1
	<i>Inner edge of tire</i>	10.6	-0.8	8.2	2.7	10.6	15.9
	<i>Center between both tires</i>	10.2	-0.9	7.4	2.5	10.2	16.5
2 inches Below Surface*	Center of tire*	68.7	19.5	127.1	42.4	68.7	2.8

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 101. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 45 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	23.5	-10.9	-9.3	-3.1	23.5	7.0
	<i>Center of tire</i>	20.3	-11.2	-13.5	-4.5	20.3	8.1
	<i>Inner edge of tire</i>	20.4	20.4	81.8	27.3	20.4	9.0
	<i>Center between both tires</i>	13.1	-4.4	-0.2	-0.1	13.1	12.7
2 inches Below Surface	<i>Outer edge of tire</i>	47.3	12.2	83.8	27.9	47.3	3.9
	<i>Center of tire</i>	59.6	19.4	118.0	39.3	59.6	3.2
	<i>Inner edge of tire</i>	45.1	13.7	86.1	28.7	45.1	4.1
	<i>Center between both tires</i>	14.1	5.3	29.9	10.0	14.1	12.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.4	7.7	57.6	19.2	34.4	5.2
	<i>Center of tire</i>	37.3	11.4	71.6	23.9	37.3	4.9
	<i>Inner edge of tire</i>	30.5	9.7	59.6	19.9	30.5	5.9
	<i>Center between both tires</i>	10.7	2.5	18.4	6.1	10.7	15.9
Mid AC Layer 2	<i>Outer edge of tire</i>	10.6	-1.8	5.3	1.8	10.6	15.8
	<i>Center of tire</i>	10.5	-1.5	6.0	2.0	10.5	16.0
	<i>Inner edge of tire</i>	10.0	-1.4	5.9	2.0	10.0	16.7
	<i>Center between both tires</i>	9.7	-1.4	5.3	1.8	9.7	17.4
2 inches Below Surface*	Center of tire*	59.6	19.4	118.0	39.3	59.6	3.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 102. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.9	-14.9	-22.8	-7.6	21.9	7.4
	<i>Center of tire</i>	29.7	70.9	242.3	80.8	29.7	7.4
	<i>Inner edge of tire</i>	20.5	20.5	82.2	27.4	20.5	9.0
	<i>Center between both tires</i>	5.9	-5.6	-10.8	-3.6	5.9	27.9
2 inches Below Surface	<i>Outer edge of tire</i>	46.0	11.7	81.1	27.0	46.0	4.0
	<i>Center of tire</i>	65.4	20.2	126.1	42.0	65.4	3.0
	<i>Inner edge of tire</i>	44.5	12.7	82.5	27.5	44.5	4.2
	<i>Center between both tires</i>	13.6	2.9	22.2	7.4	13.6	12.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.1	13.3	74.2	24.7	34.1	5.4
	<i>Center of tire</i>	32.9	16.4	82.2	27.4	32.9	5.6
	<i>Inner edge of tire</i>	31.2	14.7	75.3	25.1	31.2	5.9
	<i>Center between both tires</i>	8.5	1.1	11.8	3.9	8.5	19.8
Mid AC Layer 2	<i>Outer edge of tire</i>	11.1	-1.3	7.3	2.4	11.1	15.2
	<i>Center of tire</i>	10.8	-1.0	8.0	2.7	10.8	15.5
	<i>Inner edge of tire</i>	10.3	-1.0	7.4	2.5	10.3	16.3
	<i>Center between both tires</i>	9.9	-1.0	6.8	2.3	9.9	16.9
2 inches Below Surface*	Center of tire*	65.4	20.2	126.1	42.0	65.4	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 103. 3D-Move Responses for SFO Pavement Under Beechcraft King Air B200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.5	-16.3	-27.3	-9.1	21.5	7.5
	<i>Center of tire</i>	35.0	66.3	233.8	77.9	35.0	6.3
	<i>Inner edge of tire</i>	20.9	20.9	83.6	27.9	20.9	8.9
	<i>Center between both tires</i>	4.2	-6.3	-14.8	-4.9	4.2	39.2
2 inches Below Surface	<i>Outer edge of tire</i>	45.8	11.4	79.9	26.6	45.8	4.0
	<i>Center of tire</i>	68.2	19.6	126.9	42.3	68.2	2.9
	<i>Inner edge of tire</i>	44.6	12.1	80.9	27.0	44.6	4.1
	<i>Center between both tires</i>	13.6	1.7	18.7	6.2	13.6	12.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	34.2	15.6	81.0	27.0	34.2	5.4
	<i>Center of tire</i>	32.2	17.7	85.3	28.4	32.2	5.8
	<i>Inner edge of tire</i>	31.8	16.6	81.5	27.2	31.8	5.8
	<i>Center between both tires</i>	7.3	0.6	9.2	3.1	7.3	22.9
Mid AC Layer 2	<i>Outer edge of tire</i>	11.4	-1.1	8.1	2.7	11.4	14.8
	<i>Center of tire</i>	11.1	-0.8	8.8	2.9	11.1	15.2
	<i>Inner edge of tire</i>	10.5	-0.8	8.1	2.7	10.5	16.0
	<i>Center between both tires</i>	10.1	-0.9	7.3	2.4	10.1	16.6
2 inches Below Surface*	Center of tire*	68.2	19.6	126.9	42.3	68.2	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

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Table 104. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 5 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	33.1	-20.6	-28.8	-9.6	33.1	4.8
	<i>Center of tire</i>	53.1	110.6	384.9	128.3	53.1	4.8
	<i>Inner edge of tire</i>	28.3	28.3	113.4	37.8	28.3	6.8
	<i>Center between both tires</i>	15.9	-1.3	12.0	4.0	15.9	10.7
2 inches Below Surface	<i>Outer edge of tire</i>	72.1	28.4	157.3	52.4	72.1	2.8
	<i>Center of tire</i>	97.6	39.8	216.9	72.3	97.6	2.2
	<i>Inner edge of tire</i>	69.2	31.2	162.7	54.2	69.2	2.9
	<i>Center between both tires</i>	20.2	5.0	35.4	11.8	20.2	8.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	71.4	26.2	150.0	50.0	71.4	2.8
	<i>Center of tire</i>	68.9	31.8	164.5	54.8	68.9	3.0
	<i>Inner edge of tire</i>	66.5	28.9	153.3	51.1	66.5	3.0
	<i>Center between both tires</i>	12.9	1.8	18.3	6.1	12.9	13.2
Mid AC Layer 2	<i>Outer edge of tire</i>	33.1	-3.8	21.7	7.2	33.1	5.2
	<i>Center of tire</i>	30.6	-2.4	23.4	7.8	30.6	5.6
	<i>Inner edge of tire</i>	26.5	-3.1	17.2	5.7	26.5	6.4
	<i>Center between both tires</i>	23.9	-3.6	13.0	4.3	23.9	7.1
2 inches Below Surface*	Center of tire*	97.6	39.8	216.9	72.3	97.6	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 105. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	32.0	-17.6	-20.7	-6.9	32.0	5.1
	<i>Center of tire</i>	71.2	93.5	351.8	117.3	71.2	3.5
	<i>Inner edge of tire</i>	29.6	29.6	118.5	39.5	29.6	6.5
	<i>Center between both tires</i>	8.4	-2.7	0.3	0.1	8.4	19.8
2 inches Below Surface	<i>Outer edge of tire</i>	70.1	26.4	149.2	49.7	70.1	2.9
	<i>Center of tire</i>	104.7	40.7	226.9	75.6	104.7	2.1
	<i>Inner edge of tire</i>	68.2	27.7	151.4	50.5	68.2	2.9
	<i>Center between both tires</i>	16.4	1.7	21.4	7.1	16.4	10.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	70.9	28.0	154.9	51.6	70.9	2.8
	<i>Center of tire</i>	66.9	30.2	157.6	52.5	66.9	3.0
	<i>Inner edge of tire</i>	68.0	29.5	156.4	52.1	68.0	3.0
	<i>Center between both tires</i>	8.0	0.0	8.0	2.7	8.0	21.1
Mid AC Layer 2	<i>Outer edge of tire</i>	34.0	-2.8	25.5	8.5	34.0	5.1
	<i>Center of tire</i>	31.3	-1.6	26.5	8.8	31.3	5.5
	<i>Inner edge of tire</i>	27.2	-2.6	19.5	6.5	27.2	6.3
	<i>Center between both tires</i>	24.5	-3.2	15.0	5.0	24.5	6.9
2 inches Below Surface*	Center of tire*	104.7	40.7	226.9	75.6	104.7	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 106. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.6	39.7	160.9	53.6	41.6	4.9
	<i>Center of tire</i>	76.9	87.0	338.1	112.7	76.9	3.2
	<i>Inner edge of tire</i>	40.7	40.7	162.7	54.2	40.7	5.0
	<i>Center between both tires</i>	7.4	-4.1	-4.9	-1.6	7.4	22.2
2 inches Below Surface	<i>Outer edge of tire</i>	69.6	25.4	145.7	48.6	69.6	2.9
	<i>Center of tire</i>	107.3	41.5	232.0	77.3	107.3	2.0
	<i>Inner edge of tire</i>	68.2	26.4	147.4	49.1	68.2	2.9
	<i>Center between both tires</i>	15.5	0.5	17.0	5.7	15.5	11.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	70.6	28.5	156.1	52.0	70.6	2.9
	<i>Center of tire</i>	67.0	32.6	164.8	54.9	67.0	3.0
	<i>Inner edge of tire</i>	68.3	29.6	157.2	52.4	68.3	3.0
	<i>Center between both tires</i>	6.2	-0.3	5.5	1.8	6.2	26.9
Mid AC Layer 2	<i>Outer edge of tire</i>	34.4	-2.5	26.8	8.9	34.4	5.0
	<i>Center of tire</i>	31.7	-1.5	27.1	9.0	31.7	5.4
	<i>Inner edge of tire</i>	27.5	-2.5	20.1	6.7	27.5	6.2
	<i>Center between both tires</i>	24.7	-3.0	15.8	5.3	24.7	6.9
2 inches Below Surface*	Center of tire*	107.3	41.5	232.0	77.3	107.3	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 107. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 15 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	35.3	-17.9	-18.4	-6.1	35.3	4.6
	<i>Center of tire</i>	27.8	-19.1	-29.5	-9.8	27.8	5.7
	<i>Inner edge of tire</i>	29.5	29.5	117.9	39.3	29.5	6.5
	<i>Center between both tires</i>	21.4	-0.7	19.4	6.5	21.4	8.0
2 inches Below Surface	<i>Outer edge of tire</i>	73.9	29.8	163.4	54.5	73.9	2.8
	<i>Center of tire</i>	94.1	39.1	211.5	70.5	94.1	2.3
	<i>Inner edge of tire</i>	70.4	33.0	169.5	56.5	70.4	2.9
	<i>Center between both tires</i>	23.2	6.9	44.0	14.7	23.2	7.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	71.4	24.9	146.0	48.7	71.4	2.8
	<i>Center of tire</i>	70.3	30.8	162.6	54.2	70.3	2.9
	<i>Inner edge of tire</i>	65.4	28.3	150.3	50.1	65.4	3.1
	<i>Center between both tires</i>	16.1	3.3	26.0	8.7	16.1	10.7
Mid AC Layer 2	<i>Outer edge of tire</i>	32.6	-4.4	19.3	6.4	32.6	5.2
	<i>Center of tire</i>	30.4	-3.0	21.5	7.2	30.4	5.6
	<i>Inner edge of tire</i>	26.2	-3.6	15.3	5.1	26.2	6.5
	<i>Center between both tires</i>	23.6	-4.1	11.3	3.8	23.6	7.2
2 inches Below Surface*	Center of tire*	94.1	39.1	211.5	70.5	94.1	2.3

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 108. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	32.4	-16.6	-17.3	-5.8	32.4	5.0
	<i>Center of tire</i>	66.7	97.8	360.1	120.0	66.7	3.7
	<i>Inner edge of tire</i>	29.3	29.3	117.3	39.1	29.3	6.6
	<i>Center between both tires</i>	10.0	-2.2	3.3	1.1	10.0	16.8
2 inches Below Surface	<i>Outer edge of tire</i>	70.6	27.1	151.9	50.6	70.6	2.8
	<i>Center of tire</i>	103.3	41.9	229.1	76.4	103.3	2.1
	<i>Inner edge of tire</i>	68.4	28.6	154.3	51.4	68.4	2.9
	<i>Center between both tires</i>	17.2	2.6	24.9	8.3	17.2	10.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	71.1	27.6	153.9	51.3	71.1	2.8
	<i>Center of tire</i>	66.9	28.8	153.3	51.1	66.9	3.0
	<i>Inner edge of tire</i>	67.7	29.5	156.1	52.0	67.7	3.0
	<i>Center between both tires</i>	9.2	0.4	10.5	3.5	9.2	18.3
Mid AC Layer 2	<i>Outer edge of tire</i>	33.7	-3.1	24.5	8.2	33.7	5.1
	<i>Center of tire</i>	31.1	-1.8	25.6	8.5	31.1	5.5
	<i>Inner edge of tire</i>	26.9	-2.7	18.9	6.3	26.9	6.3
	<i>Center between both tires</i>	24.3	-3.3	14.5	4.8	24.3	7.0
2 inches Below Surface*	Center of tire*	103.3	41.9	229.1	76.4	103.3	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 109. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.7	41.0	163.7	54.6	40.7	5.0
	<i>Center of tire</i>	75.5	89.0	342.4	114.1	75.5	3.2
	<i>Inner edge of tire</i>	39.7	39.7	158.6	52.9	39.7	5.1
	<i>Center between both tires</i>	7.4	-3.9	-4.1	-1.4	7.4	22.2
2 inches Below Surface	<i>Outer edge of tire</i>	69.8	25.6	146.7	48.9	69.8	2.9
	<i>Center of tire</i>	106.9	41.9	232.7	77.6	106.9	2.0
	<i>Inner edge of tire</i>	68.2	26.8	148.5	49.5	68.2	2.9
	<i>Center between both tires</i>	15.7	0.8	18.2	6.1	15.7	10.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	70.7	28.4	155.9	52.0	70.7	2.9
	<i>Center of tire</i>	67.0	31.8	162.5	54.2	67.0	3.0
	<i>Inner edge of tire</i>	68.3	29.6	157.1	52.4	68.3	3.0
	<i>Center between both tires</i>	6.7	-0.2	6.0	2.0	6.7	25.0
Mid AC Layer 2	<i>Outer edge of tire</i>	34.3	-2.6	26.5	8.8	34.3	5.0
	<i>Center of tire</i>	31.6	-1.6	26.9	9.0	31.6	5.5
	<i>Inner edge of tire</i>	27.4	-2.5	20.0	6.7	27.4	6.2
	<i>Center between both tires</i>	24.6	-3.1	15.4	5.1	24.6	6.9
2 inches Below Surface*	Center of tire*	106.9	41.9	232.7	77.6	106.9	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 110. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 45 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.0	-14.5	-4.3	-1.4	39.0	4.2
	<i>Center of tire</i>	27.7	-15.3	-18.2	-6.1	27.7	5.9
	<i>Inner edge of tire</i>	36.6	36.6	146.5	48.8	36.6	5.4
	<i>Center between both tires</i>	28.8	0.2	29.4	9.8	28.8	6.0
2 inches Below Surface	<i>Outer edge of tire</i>	76.6	31.4	170.8	56.9	76.6	2.7
	<i>Center of tire</i>	91.2	38.4	206.6	68.9	91.2	2.3
	<i>Inner edge of tire</i>	72.3	34.5	175.8	58.6	72.3	2.8
	<i>Center between both tires</i>	27.1	9.2	54.8	18.3	27.1	6.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	71.3	22.9	140.1	46.7	71.3	2.8
	<i>Center of tire</i>	73.2	29.6	162.0	54.0	73.2	2.8
	<i>Inner edge of tire</i>	63.9	27.2	145.5	48.5	63.9	3.1
	<i>Center between both tires</i>	20.1	5.0	35.2	11.7	20.1	8.7
Mid AC Layer 2	<i>Outer edge of tire</i>	32.3	-5.3	16.5	5.5	32.3	5.3
	<i>Center of tire</i>	30.2	-3.8	18.8	6.3	30.2	5.6
	<i>Inner edge of tire</i>	26.1	-4.3	13.1	4.4	26.1	6.5
	<i>Center between both tires</i>	23.4	-4.7	9.3	3.1	23.4	7.2
2 inches Below Surface*	Center of tire*	91.2	38.4	206.6	68.9	91.2	2.3

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 111. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	32.2	-22.3	-34.8	-11.6	32.2	4.9
	<i>Center of tire</i>	60.0	103.7	371.2	123.7	60.0	4.2
	<i>Inner edge of tire</i>	28.2	28.2	112.7	37.6	28.2	6.8
	<i>Center between both tires</i>	12.8	-1.7	7.6	2.5	12.8	13.1
2 inches Below Surface	<i>Outer edge of tire</i>	71.3	28.1	155.7	51.9	71.3	2.8
	<i>Center of tire</i>	100.5	41.1	223.7	74.6	100.5	2.2
	<i>Inner edge of tire</i>	68.7	30.0	158.6	52.9	68.7	2.9
	<i>Center between both tires</i>	18.6	3.9	30.2	10.1	18.6	9.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	71.3	27.0	152.3	50.8	71.3	2.8
	<i>Center of tire</i>	68.0	30.6	159.6	53.2	68.0	3.0
	<i>Inner edge of tire</i>	67.2	29.3	155.0	51.7	67.2	3.0
	<i>Center between both tires</i>	11.1	1.1	14.5	4.8	11.1	15.3
Mid AC Layer 2	<i>Outer edge of tire</i>	33.4	-3.4	23.1	7.7	33.4	5.1
	<i>Center of tire</i>	30.8	-2.1	24.7	8.2	30.8	5.6
	<i>Inner edge of tire</i>	26.7	-2.9	18.0	6.0	26.7	6.4
	<i>Center between both tires</i>	24.1	-3.5	13.7	4.6	24.1	7.0
2 inches Below Surface*	Center of tire*	100.5	41.1	223.7	74.6	100.5	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 112. 3D-Move Responses for SFO Pavement Under Bombardier CRJ 200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	31.9	-18.0	-22.0	-7.3	31.9	5.1
	<i>Center of tire</i>	73.2	91.6	347.9	116.0	73.2	3.3
	<i>Inner edge of tire</i>	38.1	38.1	152.3	50.8	38.1	5.3
	<i>Center between both tires</i>	7.9	-2.9	-0.9	-0.3	7.9	21.0
2 inches Below Surface	<i>Outer edge of tire</i>	70.0	26.1	148.2	49.4	70.0	2.9
	<i>Center of tire</i>	106.3	42.6	234.0	78.0	106.3	2.1
	<i>Inner edge of tire</i>	68.2	27.3	150.2	50.1	68.2	2.9
	<i>Center between both tires</i>	16.1	1.3	20.0	6.7	16.1	10.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	70.9	28.2	155.5	51.8	70.9	2.8
	<i>Center of tire</i>	67.0	30.8	159.4	53.1	67.0	3.0
	<i>Inner edge of tire</i>	68.1	29.6	156.9	52.3	68.1	3.0
	<i>Center between both tires</i>	7.5	-0.1	7.1	2.4	7.5	22.6
Mid AC Layer 2	<i>Outer edge of tire</i>	34.1	-2.7	26.0	8.7	34.1	5.1
	<i>Center of tire</i>	31.4	-1.6	26.5	8.8	31.4	5.5
	<i>Inner edge of tire</i>	27.3	-2.5	19.8	6.6	27.3	6.3
	<i>Center between both tires</i>	24.6	-3.1	15.2	5.1	24.6	6.9
2 inches Below Surface*	Center of tire*	106.3	42.6	234.0	78.0	106.3	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Gulfstream G600 Aircraft

Table 113. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 5 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	36.0	-17.7	-17.0	-5.7	36.0	4.5
	<i>Center of tire</i>	64.5	130.0	454.5	151.5	64.5	4.2
	<i>Inner edge of tire</i>	31.0	31.0	123.9	41.3	31.0	6.3
	<i>Center between both tires</i>	28.3	1.4	32.6	10.9	28.3	6.1
2 inches Below Surface	<i>Outer edge of tire</i>	80.9	40.1	201.2	67.1	80.9	2.6
	<i>Center of tire</i>	107.6	54.0	269.6	89.9	107.6	2.1
	<i>Inner edge of tire</i>	74.6	43.2	204.1	68.0	74.6	2.8
	<i>Center between both tires</i>	36.6	9.8	65.8	21.9	36.6	5.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.7	35.7	197.8	65.9	90.7	2.3
	<i>Center of tire</i>	85.2	35.4	191.5	63.8	85.2	2.5
	<i>Inner edge of tire</i>	81.1	40.5	202.7	67.6	81.1	2.6
	<i>Center between both tires</i>	22.3	3.7	33.5	11.2	22.3	7.8
Mid AC Layer 2	<i>Outer edge of tire</i>	58.0	-6.7	37.9	12.6	58.0	3.0
	<i>Center of tire</i>	52.9	-5.5	36.5	12.2	52.9	3.3
	<i>Inner edge of tire</i>	45.8	-6.7	25.6	8.5	45.8	3.8
	<i>Center between both tires</i>	42.6	-7.2	21.0	7.0	42.6	4.0
2 inches Below Surface*	Center of tire*	107.6	54.0	269.6	89.9	107.6	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 114. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	32.6	-14.9	-12.0	-4.0	32.6	5.0
	<i>Center of tire</i>	90.1	106.6	409.9	136.6	90.1	2.9
	<i>Inner edge of tire</i>	38.5	38.5	153.9	51.3	38.5	5.2
	<i>Center between both tires</i>	15.1	2.9	23.8	7.9	15.1	11.4
2 inches Below Surface	<i>Outer edge of tire</i>	78.5	35.5	184.9	61.6	78.5	2.7
	<i>Center of tire</i>	116.2	51.3	270.0	90.0	116.2	2.0
	<i>Inner edge of tire</i>	74.6	38.4	189.8	63.3	74.6	2.8
	<i>Center between both tires</i>	28.4	4.0	40.3	13.4	28.4	6.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	89.3	34.5	193.0	64.3	89.3	2.4
	<i>Center of tire</i>	85.7	37.8	199.2	66.4	85.7	2.5
	<i>Inner edge of tire</i>	83.7	37.8	197.0	65.7	83.7	2.5
	<i>Center between both tires</i>	13.6	0.7	15.6	5.2	13.6	12.5
Mid AC Layer 2	<i>Outer edge of tire</i>	59.3	-4.9	44.7	14.9	59.3	3.0
	<i>Center of tire</i>	53.9	-4.0	41.8	13.9	53.9	3.3
	<i>Inner edge of tire</i>	46.7	-5.3	31.0	10.3	46.7	3.7
	<i>Center between both tires</i>	43.6	-5.4	27.5	9.2	43.6	4.0
2 inches Below Surface*	Center of tire*	116.2	51.3	270.0	90.0	116.2	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 115. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	46.7	47.3	188.5	62.8	46.7	4.5
	<i>Center of tire</i>	98.1	98.7	394.0	131.3	98.1	2.6
	<i>Inner edge of tire</i>	44.3	44.3	177.0	59.0	44.3	4.7
	<i>Center between both tires</i>	11.5	-3.7	0.3	0.1	11.5	14.4
2 inches Below Surface	<i>Outer edge of tire</i>	78.2	33.2	177.8	59.3	78.2	2.6
	<i>Center of tire</i>	120.2	53.4	280.5	93.5	120.2	1.9
	<i>Inner edge of tire</i>	75.2	35.5	181.7	60.6	75.2	2.8
	<i>Center between both tires</i>	26.4	1.8	31.9	10.6	26.4	6.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	88.7	34.0	190.7	63.6	88.7	2.4
	<i>Center of tire</i>	86.1	39.4	204.4	68.1	86.1	2.5
	<i>Inner edge of tire</i>	84.4	36.4	193.6	64.5	84.4	2.5
	<i>Center between both tires</i>	10.6	0.1	11.1	3.7	10.6	15.9
Mid AC Layer 2	<i>Outer edge of tire</i>	59.8	-4.3	46.9	15.6	59.8	3.0
	<i>Center of tire</i>	54.4	-3.6	43.6	14.5	54.4	3.2
	<i>Inner edge of tire</i>	47.3	-4.6	33.4	11.1	47.3	3.7
	<i>Center between both tires</i>	44.1	-5.3	28.3	9.4	44.1	3.9
2 inches Below Surface*	Center of tire*	120.2	53.4	280.5	93.5	120.2	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 116. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 15 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	40.9	-14.0	-1.2	-0.4	40.9	4.1
	<i>Center of tire</i>	49.9	150.6	501.6	167.2	49.9	5.6
	<i>Inner edge of tire</i>	39.9	39.9	159.5	53.2	39.9	5.1
	<i>Center between both tires</i>	38.0	3.1	47.3	15.8	38.0	4.7
2 inches Below Surface	<i>Outer edge of tire</i>	83.3	41.7	208.5	69.5	83.3	2.6
	<i>Center of tire</i>	102.7	52.7	260.9	87.0	102.7	2.2
	<i>Inner edge of tire</i>	75.7	43.0	204.9	68.3	75.7	2.8
	<i>Center between both tires</i>	42.6	13.2	82.2	27.4	42.6	4.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.3	36.1	199.6	66.5	91.3	2.3
	<i>Center of tire</i>	86.7	38.8	203.1	67.7	86.7	2.4
	<i>Inner edge of tire</i>	79.0	39.6	197.8	65.9	79.0	2.7
	<i>Center between both tires</i>	28.1	6.3	47.1	15.7	28.1	6.3
Mid AC Layer 2	<i>Outer edge of tire</i>	57.4	-7.9	33.8	11.3	57.4	3.0
	<i>Center of tire</i>	52.5	-6.5	33.1	11.0	52.5	3.3
	<i>Inner edge of tire</i>	45.3	-7.6	22.7	7.6	45.3	3.8
	<i>Center between both tires</i>	42.1	-8.0	18.1	6.0	42.1	4.0
2 inches Below Surface*	Center of tire*	102.7	52.7	260.9	87.0	102.7	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 117. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	32.0	-22.0	-33.9	-11.3	32.0	5.0
	<i>Center of tire</i>	83.6	112.0	419.5	139.8	83.6	3.1
	<i>Inner edge of tire</i>	27.6	27.6	110.3	36.8	27.6	6.9
	<i>Center between both tires</i>	18.2	3.8	29.5	9.8	18.2	9.5
2 inches Below Surface	<i>Outer edge of tire</i>	78.7	35.9	186.3	62.1	78.7	2.6
	<i>Center of tire</i>	114.6	53.2	274.2	91.4	114.6	2.0
	<i>Inner edge of tire</i>	74.5	40.4	195.8	65.3	74.5	2.8
	<i>Center between both tires</i>	30.2	5.5	46.7	15.6	30.2	5.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	89.8	34.9	194.5	64.8	89.8	2.3
	<i>Center of tire</i>	85.5	37.0	196.5	65.5	85.5	2.5
	<i>Inner edge of tire</i>	83.1	38.7	199.2	66.4	83.1	2.5
	<i>Center between both tires</i>	15.8	1.4	19.9	6.6	15.8	10.8
Mid AC Layer 2	<i>Outer edge of tire</i>	58.9	-5.3	42.9	14.3	58.9	3.0
	<i>Center of tire</i>	53.6	-4.6	39.9	13.3	53.6	3.3
	<i>Inner edge of tire</i>	46.4	-5.7	29.3	9.8	46.4	3.7
	<i>Center between both tires</i>	43.3	-6.0	25.3	8.4	43.3	4.0
2 inches Below Surface*	Center of tire*	114.6	53.2	274.2	91.4	114.6	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 118. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.4	49.0	192.3	64.1	45.4	4.6
	<i>Center of tire</i>	96.0	101.0	399.1	133.0	96.0	2.7
	<i>Inner edge of tire</i>	42.7	42.7	170.9	57.0	42.7	4.8
	<i>Center between both tires</i>	12.1	-2.3	5.3	1.8	12.1	13.9
2 inches Below Surface	<i>Outer edge of tire</i>	78.2	33.8	179.8	59.9	78.2	2.6
	<i>Center of tire</i>	119.7	54.0	281.7	93.9	119.7	1.9
	<i>Inner edge of tire</i>	75.0	36.3	183.9	61.3	75.0	2.8
	<i>Center between both tires</i>	26.9	2.4	34.1	11.4	26.9	6.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	88.9	34.2	191.4	63.8	88.9	2.4
	<i>Center of tire</i>	85.9	38.9	202.7	67.6	85.9	2.5
	<i>Inner edge of tire</i>	84.2	36.8	194.6	64.9	84.2	2.5
	<i>Center between both tires</i>	11.5	0.2	12.1	4.0	11.5	14.8
Mid AC Layer 2	<i>Outer edge of tire</i>	59.7	-4.5	46.3	15.4	59.7	3.0
	<i>Center of tire</i>	54.2	-3.6	43.3	14.4	54.2	3.2
	<i>Inner edge of tire</i>	47.2	-4.6	33.2	11.1	47.2	3.7
	<i>Center between both tires</i>	43.9	-5.3	28.1	9.4	43.9	3.9
2 inches Below Surface*	Center of tire*	119.7	54.0	281.7	93.9	119.7	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 119. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 45 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	48.2	-14.1	5.7	1.9	48.2	3.5
	<i>Center of tire</i>	40.4	-2.5	33.0	11.0	40.4	4.3
	<i>Inner edge of tire</i>	52.1	52.1	208.5	69.5	52.1	4.1
	<i>Center between both tires</i>	51.0	5.2	66.5	22.2	51.0	3.6
2 inches Below Surface	<i>Outer edge of tire</i>	87.0	41.2	210.7	70.2	87.0	2.5
	<i>Center of tire</i>	99.4	51.5	253.9	84.6	99.4	2.3
	<i>Inner edge of tire</i>	79.2	41.8	204.6	68.2	79.2	2.7
	<i>Center between both tires</i>	50.6	17.3	102.6	34.2	50.6	3.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.7	36.6	201.7	67.2	91.7	2.3
	<i>Center of tire</i>	88.1	40.1	208.4	69.5	88.1	2.4
	<i>Inner edge of tire</i>	76.7	38.6	192.4	64.1	76.7	2.7
	<i>Center between both tires</i>	35.7	9.9	65.4	21.8	35.7	5.1
Mid AC Layer 2	<i>Outer edge of tire</i>	56.9	-9.4	28.7	9.6	56.9	3.0
	<i>Center of tire</i>	52.3	-7.9	28.7	9.6	52.3	3.3
	<i>Inner edge of tire</i>	45.0	-9.0	18.1	6.0	45.0	3.8
	<i>Center between both tires</i>	41.8	-9.3	13.8	4.6	41.8	4.1
2 inches Below Surface*	Center of tire*	99.4	51.5	253.9	84.6	99.4	2.3

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 120. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	33.8	-19.9	-26.0	-8.7	33.8	4.7
	<i>Center of tire</i>	74.2	120.4	435.4	145.1	74.2	3.6
	<i>Inner edge of tire</i>	26.6	26.6	106.6	35.5	26.6	7.1
	<i>Center between both tires</i>	22.8	0.4	24.0	8.0	22.8	7.5
2 inches Below Surface	<i>Outer edge of tire</i>	79.6	38.1	193.9	64.6	79.6	2.6
	<i>Center of tire</i>	111.9	56.3	280.8	93.6	111.9	2.1
	<i>Inner edge of tire</i>	74.3	42.1	200.6	66.9	74.3	2.8
	<i>Center between both tires</i>	33.3	7.7	56.3	18.8	33.3	5.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.3	35.4	196.6	65.5	90.3	2.3
	<i>Center of tire</i>	85.4	36.1	193.6	64.5	85.4	2.5
	<i>Inner edge of tire</i>	82.2	40.0	202.1	67.4	82.2	2.6
	<i>Center between both tires</i>	19.1	2.7	27.1	9.0	19.1	9.0
Mid AC Layer 2	<i>Outer edge of tire</i>	58.4	-6.0	40.5	13.5	58.4	3.0
	<i>Center of tire</i>	53.3	-5.0	38.3	12.8	53.3	3.3
	<i>Inner edge of tire</i>	46.2	-6.1	27.9	9.3	46.2	3.7
	<i>Center between both tires</i>	43.0	-6.6	23.2	7.7	43.0	4.0
2 inches Below Surface*	Center of tire*	111.9	56.3	280.8	93.6	111.9	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 121. 3D-Move Responses for SFO Pavement Under Gulfstream G600 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	43.4	51.4	197.5	65.8	43.4	4.9
	<i>Center of tire</i>	92.7	103.9	404.5	134.8	92.7	2.8
	<i>Inner edge of tire</i>	40.4	40.4	161.5	53.8	40.4	5.0
	<i>Center between both tires</i>	13.9	2.5	21.4	7.1	13.9	12.3
2 inches Below Surface	<i>Outer edge of tire</i>	78.4	34.8	182.8	60.9	78.4	2.6
	<i>Center of tire</i>	118.9	55.0	283.9	94.6	118.9	1.9
	<i>Inner edge of tire</i>	74.8	37.5	187.4	62.5	74.8	2.8
	<i>Center between both tires</i>	27.7	3.3	37.5	12.5	27.7	6.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	89.2	34.4	192.5	64.2	89.2	2.4
	<i>Center of tire</i>	85.9	38.2	200.4	66.8	85.9	2.5
	<i>Inner edge of tire</i>	83.9	37.4	196.2	65.4	83.9	2.5
	<i>Center between both tires</i>	12.7	0.4	13.9	4.6	12.7	13.3
Mid AC Layer 2	<i>Outer edge of tire</i>	59.5	-4.6	45.5	15.2	59.5	3.0
	<i>Center of tire</i>	54.1	-3.8	42.7	14.2	54.1	3.3
	<i>Inner edge of tire</i>	47.1	-4.7	33.0	11.0	47.1	3.7
	<i>Center between both tires</i>	43.9	-5.3	27.9	9.3	43.9	3.9
2 inches Below Surface*	Center of tire*	118.9	55.0	283.9	94.6	118.9	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

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Table 122. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 5 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	37.5	-16.0	-10.6	-3.5	37.5	4.4
	<i>Center of tire</i>	71.0	144.1	503.1	167.7	71.0	3.9
	<i>Inner edge of tire</i>	38.6	38.6	154.2	51.4	38.6	5.2
	<i>Center between both tires</i>	37.2	7.9	60.9	20.3	37.2	4.8
2 inches Below Surface	<i>Outer edge of tire</i>	83.4	45.4	219.7	73.2	83.4	2.6
	<i>Center of tire</i>	111.4	66.8	311.9	104.0	111.4	2.1
	<i>Inner edge of tire</i>	79.1	49.3	227.1	75.7	79.1	2.8
	<i>Center between both tires</i>	30.9	9.6	59.8	19.9	30.9	5.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.9	43.6	233.8	77.9	102.9	2.1
	<i>Center of tire</i>	98.3	41.1	221.5	73.8	98.3	2.2
	<i>Inner edge of tire</i>	96.5	47.3	238.6	79.5	96.5	2.3
	<i>Center between both tires</i>	24.6	8.4	49.9	16.6	24.6	7.2
Mid AC Layer 2	<i>Outer edge of tire</i>	83.1	-9.0	56.3	18.8	83.1	2.2
	<i>Center of tire</i>	76.4	-7.7	53.1	17.7	76.4	2.3
	<i>Inner edge of tire</i>	61.6	-7.4	39.4	13.1	61.6	2.8
	<i>Center between both tires</i>	41.5	-7.7	18.4	6.1	41.5	4.1
2 inches Below Surface*	Center of tire*	111.4	66.8	311.9	104.0	111.4	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 123. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.7	62.7	229.8	76.6	41.7	5.2
	<i>Center of tire</i>	99.5	110.6	431.3	143.8	99.5	2.7
	<i>Inner edge of tire</i>	39.5	39.5	157.9	52.6	39.5	5.1
	<i>Center between both tires</i>	17.7	2.6	25.4	8.5	17.7	9.7
2 inches Below Surface	<i>Outer edge of tire</i>	81.2	41.7	206.2	68.7	81.2	2.6
	<i>Center of tire</i>	123.1	63.6	313.9	104.6	123.1	1.9
	<i>Inner edge of tire</i>	79.4	42.6	207.3	69.1	79.4	2.7
	<i>Center between both tires</i>	14.4	4.7	28.5	9.5	14.4	12.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	100.8	39.6	219.7	73.2	100.8	2.1
	<i>Center of tire</i>	98.1	40.2	218.8	72.9	98.1	2.2
	<i>Inner edge of tire</i>	98.2	41.6	223.1	74.4	98.2	2.2
	<i>Center between both tires</i>	10.6	3.9	22.3	7.4	10.6	16.1
Mid AC Layer 2	<i>Outer edge of tire</i>	84.4	-6.4	65.1	21.7	84.4	2.1
	<i>Center of tire</i>	77.6	-5.4	61.6	20.5	77.6	2.3
	<i>Inner edge of tire</i>	62.8	-5.1	47.4	15.8	62.8	2.8
	<i>Center between both tires</i>	42.8	-5.7	25.9	8.6	42.8	4.0
2 inches Below Surface*	Center of tire*	123.1	63.6	313.9	104.6	123.1	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 124. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	47.3	57.4	219.6	73.2	47.3	4.6
	<i>Center of tire</i>	107.6	101.1	411.1	137.0	107.6	2.4
	<i>Inner edge of tire</i>	46.3	46.3	185.4	61.8	46.3	4.5
	<i>Center between both tires</i>	11.1	0.7	13.3	4.4	11.1	15.3
2 inches Below Surface	<i>Outer edge of tire</i>	81.7	39.9	201.4	67.1	81.7	2.6
	<i>Center of tire</i>	127.8	67.4	329.9	110.0	127.8	1.9
	<i>Inner edge of tire</i>	80.9	40.8	203.4	67.8	80.9	2.6
	<i>Center between both tires</i>	8.7	3.0	17.9	6.0	8.7	19.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	100.1	38.2	214.6	71.5	100.1	2.1
	<i>Center of tire</i>	98.6	40.6	220.3	73.4	98.6	2.2
	<i>Inner edge of tire</i>	98.7	39.3	216.5	72.2	98.7	2.2
	<i>Center between both tires</i>	5.8	2.4	12.9	4.3	5.8	29.1
Mid AC Layer 2	<i>Outer edge of tire</i>	85.0	-5.5	68.4	22.8	85.0	2.1
	<i>Center of tire</i>	78.1	-4.9	63.4	21.1	78.1	2.3
	<i>Inner edge of tire</i>	63.2	-4.6	49.4	16.5	63.2	2.8
	<i>Center between both tires</i>	43.4	-5.0	28.3	9.4	43.4	4.0
2 inches Below Surface*	Center of tire*	127.8	67.4	329.9	110.0	127.8	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 125. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 15 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	46.1	-12.1	9.7	3.2	46.1	3.7
	<i>Center of tire</i>	40.7	-1.8	35.4	11.8	40.7	4.3
	<i>Inner edge of tire</i>	52.1	52.1	208.6	69.5	52.1	4.1
	<i>Center between both tires</i>	49.2	11.2	82.8	27.6	49.2	3.8
2 inches Below Surface	<i>Outer edge of tire</i>	86.4	42.5	213.9	71.3	86.4	2.5
	<i>Center of tire</i>	105.3	64.1	297.7	99.2	105.3	2.2
	<i>Inner edge of tire</i>	81.3	42.8	209.5	69.8	81.3	2.6
	<i>Center between both tires</i>	41.1	12.6	79.0	26.3	41.1	4.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	104.0	45.2	239.8	79.9	104.0	2.1
	<i>Center of tire</i>	98.5	41.8	224.1	74.7	98.5	2.2
	<i>Inner edge of tire</i>	94.1	44.7	228.1	76.0	94.1	2.3
	<i>Center between both tires</i>	33.2	11.3	67.1	22.4	33.2	5.5
Mid AC Layer 2	<i>Outer edge of tire</i>	82.6	-10.6	50.7	16.9	82.6	2.2
	<i>Center of tire</i>	76.0	-9.0	48.8	16.3	76.0	2.3
	<i>Inner edge of tire</i>	61.0	-9.1	33.8	11.3	61.0	2.9
	<i>Center between both tires</i>	40.8	-8.9	14.0	4.7	40.8	4.2
Bottom AC Layer 1*	Outer edge of tire*	104.0	45.2	239.8	79.9	104.0	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 126. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	31.6	-12.0	-4.5	-1.5	31.6	5.2
	<i>Center of tire</i>	92.3	117.8	445.9	148.6	92.3	2.9
	<i>Inner edge of tire</i>	34.1	34.1	136.4	45.5	34.1	5.8
	<i>Center between both tires</i>	22.7	3.9	34.5	11.5	22.7	7.7
2 inches Below Surface	<i>Outer edge of tire</i>	81.6	44.1	214.0	71.3	81.6	2.6
	<i>Center of tire</i>	120.8	66.2	319.5	106.5	120.8	2.0
	<i>Inner edge of tire</i>	79.5	48.2	224.2	74.7	79.5	2.7
	<i>Center between both tires</i>	18.7	6.0	36.5	12.2	18.7	9.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	101.4	40.8	223.8	74.6	101.4	2.1
	<i>Center of tire</i>	98.1	40.3	218.9	73.0	98.1	2.2
	<i>Inner edge of tire</i>	97.9	43.4	228.0	76.0	97.9	2.2
	<i>Center between both tires</i>	14.2	5.1	29.5	9.8	14.2	12.2
Mid AC Layer 2	<i>Outer edge of tire</i>	84.1	-7.0	63.1	21.0	84.1	2.1
	<i>Center of tire</i>	77.2	-6.1	58.8	19.6	77.2	2.3
	<i>Inner edge of tire</i>	62.4	-5.8	44.9	15.0	62.4	2.8
	<i>Center between both tires</i>	42.5	-6.2	23.9	8.0	42.5	4.0
2 inches Below Surface*	Center of tire*	120.8	66.2	319.5	106.5	120.8	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 127. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	45.7	59.1	223.0	74.3	45.7	4.7
	<i>Center of tire</i>	105.4	103.4	415.6	138.5	105.4	2.5
	<i>Inner edge of tire</i>	44.5	44.5	177.8	59.3	44.5	4.6
	<i>Center between both tires</i>	13.0	1.3	16.8	5.6	13.0	13.1
2 inches Below Surface	<i>Outer edge of tire</i>	81.6	40.9	204.4	68.1	81.6	2.6
	<i>Center of tire</i>	124.6	61.7	309.8	103.3	124.6	1.9
	<i>Inner edge of tire</i>	80.6	41.8	205.8	68.6	80.6	2.6
	<i>Center between both tires</i>	10.3	3.5	21.0	7.0	10.3	16.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	100.3	38.6	216.2	72.1	100.3	2.1
	<i>Center of tire</i>	98.4	40.4	219.7	73.2	98.4	2.2
	<i>Inner edge of tire</i>	98.5	40.0	218.4	72.8	98.5	2.2
	<i>Center between both tires</i>	7.2	2.8	15.6	5.2	7.2	23.6
Mid AC Layer 2	<i>Outer edge of tire</i>	84.8	-5.8	67.5	22.5	84.8	2.1
	<i>Center of tire</i>	78.1	-4.6	64.4	21.5	78.1	2.3
	<i>Inner edge of tire</i>	63.1	-4.9	48.4	16.1	63.1	2.8
	<i>Center between both tires</i>	43.2	-5.2	27.5	9.2	43.2	4.0
2 inches Below Surface*	Center of tire*	124.6	61.7	309.8	103.3	124.6	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 128. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 45 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	63.6	3.1	72.9	24.3	63.6	2.9
	<i>Center of tire</i>	55.1	3.0	64.0	21.3	55.1	3.3
	<i>Inner edge of tire</i>	70.0	70.0	280.1	93.4	70.0	3.3
	<i>Center between both tires</i>	65.0	16.3	113.9	38.0	65.0	3.0
2 inches Below Surface	<i>Outer edge of tire</i>	93.8	43.0	222.9	74.3	93.8	2.3
	<i>Center of tire</i>	100.4	46.4	239.7	79.9	100.4	2.2
	<i>Inner edge of tire</i>	90.0	43.6	220.8	73.6	90.0	2.4
	<i>Center between both tires</i>	54.4	17.3	106.2	35.4	54.4	3.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	105.8	48.5	251.2	83.7	105.8	2.1
	<i>Center of tire</i>	99.1	42.8	227.6	75.9	99.1	2.2
	<i>Inner edge of tire</i>	93.0	43.2	222.5	74.2	93.0	2.3
	<i>Center between both tires</i>	44.3	15.0	89.3	29.8	44.3	4.2
Mid AC Layer 2	<i>Outer edge of tire</i>	82.1	-12.8	43.6	14.5	82.1	2.1
	<i>Center of tire</i>	75.8	-10.9	43.0	14.3	75.8	2.3
	<i>Inner edge of tire</i>	60.8	-10.8	28.3	9.4	60.8	2.8
	<i>Center between both tires</i>	40.3	-10.6	8.6	2.9	40.3	4.2
Bottom AC Layer 1*	Outer edge of tire*	105.8	48.5	251.2	83.7	105.8	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 129. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	33.4	-18.6	-22.2	-7.4	33.4	4.8
	<i>Center of tire</i>	81.9	130.7	473.9	158.0	81.9	3.3
	<i>Inner edge of tire</i>	30.8	30.8	123.3	41.1	30.8	6.3
	<i>Center between both tires</i>	30.2	5.9	48.0	16.0	30.2	5.9
2 inches Below Surface	<i>Outer edge of tire</i>	82.1	45.3	218.1	72.7	82.1	2.6
	<i>Center of tire</i>	114.2	62.6	302.0	100.7	114.2	2.1
	<i>Inner edge of tire</i>	79.2	50.8	231.5	77.2	79.2	2.8
	<i>Center between both tires</i>	24.9	7.8	48.2	16.1	24.9	7.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.1	42.2	228.8	76.3	102.1	2.1
	<i>Center of tire</i>	98.1	40.6	220.0	73.3	98.1	2.2
	<i>Inner edge of tire</i>	97.3	45.9	235.1	78.4	97.3	2.3
	<i>Center between both tires</i>	19.5	6.8	39.7	13.2	19.5	9.0
Mid AC Layer 2	<i>Outer edge of tire</i>	83.6	-7.9	59.8	19.9	83.6	2.2
	<i>Center of tire</i>	76.8	-7.2	55.3	18.4	76.8	2.3
	<i>Inner edge of tire</i>	62.1	-6.8	41.7	13.9	62.1	2.8
	<i>Center between both tires</i>	42.2	-7.0	21.4	7.1	42.2	4.1
2 inches Below Surface*	Center of tire*	114.2	62.6	302.0	100.7	114.2	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 130. 3D-Move Responses for SFO Pavement Under Boeing 737 MAX 8 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.3	61.3	227.2	75.7	43.3	5.0
	<i>Center of tire</i>	101.8	107.0	422.8	140.9	101.8	2.6
	<i>Inner edge of tire</i>	41.5	41.5	166.0	55.3	41.5	4.9
	<i>Center between both tires</i>	15.8	2.1	22.0	7.3	15.8	10.9
2 inches Below Surface	<i>Outer edge of tire</i>	81.6	42.5	208.9	69.6	81.6	2.6
	<i>Center of tire</i>	123.8	62.9	312.4	104.1	123.8	1.9
	<i>Inner edge of tire</i>	80.0	43.2	209.8	69.9	80.0	2.7
	<i>Center between both tires</i>	12.8	4.3	25.6	8.5	12.8	13.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	100.5	39.3	218.4	72.8	100.5	2.1
	<i>Center of tire</i>	98.3	40.2	219.0	73.0	98.3	2.2
	<i>Inner edge of tire</i>	98.3	41.0	221.4	73.8	98.3	2.2
	<i>Center between both tires</i>	9.3	3.5	19.6	6.5	9.3	18.5
Mid AC Layer 2	<i>Outer edge of tire</i>	84.6	-6.1	66.5	22.2	84.6	2.1
	<i>Center of tire</i>	78.0	-5.0	63.1	21.0	78.0	2.3
	<i>Inner edge of tire</i>	63.0	-5.3	47.2	15.7	63.0	2.8
	<i>Center between both tires</i>	43.3	-5.6	26.6	8.9	43.3	4.0
2 inches Below Surface*	Center of tire*	123.8	62.9	312.4	104.1	123.8	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Boeing 777-200 Aircraft

Table 131. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 5 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	36.9	-17.2	-14.7	-4.9	36.9	4.4
	<i>Center of tire</i>	74.2	117.9	428.1	142.7	74.2	3.5
	<i>Inner edge of tire</i>	33.9	33.9	135.4	45.1	33.9	5.8
	<i>Center between both tires</i>	30.0	5.9	47.7	15.9	30.0	5.9
2 inches Below Surface	<i>Outer edge of tire</i>	74.8	37.8	188.2	62.7	74.8	2.8
	<i>Center of tire</i>	106.9	57.4	278.9	93.0	106.9	2.1
	<i>Inner edge of tire</i>	73.2	43.6	203.9	68.0	73.2	2.9
	<i>Center between both tires</i>	25.2	7.2	46.8	15.6	25.2	7.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.8	36.2	200.3	66.8	91.8	2.3
	<i>Center of tire</i>	91.3	38.1	205.6	68.5	91.3	2.3
	<i>Inner edge of tire</i>	90.2	36.9	200.9	67.0	90.2	2.3
	<i>Center between both tires</i>	20.2	6.2	38.9	13.0	20.2	8.7
Mid AC Layer 2	<i>Outer edge of tire</i>	78.0	-8.9	51.4	17.1	78.0	2.3
	<i>Center of tire</i>	76.0	-7.8	52.6	17.5	76.0	2.3
	<i>Inner edge of tire</i>	66.0	-6.7	45.8	15.3	66.0	2.7
	<i>Center between both tires</i>	28.6	-1.3	24.7	8.2	28.6	6.0
2 inches Below Surface *	Center of tire*	106.9	57.4	278.9	93.0	106.9	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 132. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.5	52.2	197.2	65.7	40.5	5.2
	<i>Center of tire</i>	93.1	95.7	380.2	126.7	93.1	2.7
	<i>Inner edge of tire</i>	38.9	38.9	155.6	51.9	38.9	5.2
	<i>Center between both tires</i>	13.7	1.1	17.1	5.7	13.7	12.4
2 inches Below Surface	<i>Outer edge of tire</i>	72.8	36.2	181.5	60.5	72.8	2.8
	<i>Center of tire</i>	113.4	58.3	288.2	96.1	113.4	2.0
	<i>Inner edge of tire</i>	72.3	35.9	179.9	60.0	72.3	2.9
	<i>Center between both tires</i>	11.4	3.1	20.8	6.9	11.4	15.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.1	33.8	191.4	63.8	90.1	2.3
	<i>Center of tire</i>	87.9	30.6	179.7	59.9	87.9	2.4
	<i>Inner edge of tire</i>	89.7	34.2	192.4	64.1	89.7	2.3
	<i>Center between both tires</i>	9.0	2.8	17.4	5.8	9.0	19.0
Mid AC Layer 2	<i>Outer edge of tire</i>	79.1	-6.5	59.6	19.9	79.1	2.3
	<i>Center of tire</i>	77.0	-5.6	60.3	20.1	77.0	2.3
	<i>Inner edge of tire</i>	67.2	-4.5	53.5	17.8	67.2	2.7
	<i>Center between both tires</i>	28.7	-1.0	25.8	8.6	28.7	6.0
2 inches Below Surface*	Center of tire*	113.4	58.3	288.2	96.1	113.4	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 133. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.0	49.6	191.7	63.9	43.0	4.9
	<i>Center of tire</i>	97.4	89.1	364.7	121.6	97.4	2.6
	<i>Inner edge of tire</i>	42.4	42.4	169.7	56.6	42.4	4.8
	<i>Center between both tires</i>	7.7	-0.5	6.1	2.0	7.7	21.8
2 inches Below Surface	<i>Outer edge of tire</i>	72.2	34.6	176.0	58.7	72.2	2.9
	<i>Center of tire</i>	113.9	57.8	287.2	95.7	113.9	2.0
	<i>Inner edge of tire</i>	72.4	35.9	180.2	60.1	72.4	2.9
	<i>Center between both tires</i>	6.4	1.7	11.4	3.8	6.4	26.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	89.4	33.3	189.4	63.1	89.4	2.3
	<i>Center of tire</i>	87.4	31.8	182.9	61.0	87.4	2.4
	<i>Inner edge of tire</i>	89.2	33.6	190.1	63.4	89.2	2.3
	<i>Center between both tires</i>	4.8	1.6	9.5	3.2	4.8	35.1
Mid AC Layer 2	<i>Outer edge of tire</i>	79.4	-5.8	62.0	20.7	79.4	2.3
	<i>Center of tire</i>	77.6	-4.4	64.4	21.5	77.6	2.3
	<i>Inner edge of tire</i>	67.7	-3.5	57.2	19.1	67.7	2.6
	<i>Center between both tires</i>	28.7	-1.0	25.7	8.6	28.7	6.0
2 inches Below Surface*	Center of tire*	113.9	57.8	287.2	95.7	113.9	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 134. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 15 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.5	-20.7	-18.7	-6.2	43.5	3.7
	<i>Center of tire</i>	41.1	-0.2	40.5	13.5	41.1	4.3
	<i>Inner edge of tire</i>	46.2	46.2	184.6	61.5	46.2	4.5
	<i>Center between both tires</i>	40.4	9.0	67.3	22.4	40.4	4.5
2 inches Below Surface	<i>Outer edge of tire</i>	76.8	35.1	182.2	60.7	76.8	2.7
	<i>Center of tire</i>	101.8	53.9	263.5	87.8	101.8	2.2
	<i>Inner edge of tire</i>	74.7	37.0	185.6	61.9	74.7	2.8
	<i>Center between both tires</i>	33.9	9.9	63.6	21.2	33.9	5.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.7	38.2	207.4	69.1	92.7	2.3
	<i>Center of tire</i>	90.6	38.4	205.9	68.6	90.6	2.3
	<i>Inner edge of tire</i>	89.5	36.1	197.7	65.9	89.5	2.4
	<i>Center between both tires</i>	27.3	8.5	52.7	17.6	27.3	6.5
Mid AC Layer 2	<i>Outer edge of tire</i>	77.5	-10.5	46.0	15.3	77.5	2.3
	<i>Center of tire</i>	75.7	-8.9	48.8	16.3	75.7	2.3
	<i>Inner edge of tire</i>	65.5	-8.4	40.4	13.5	65.5	2.7
	<i>Center between both tires</i>	28.4	-1.8	23.1	7.7	28.4	6.0
2 inches Below Surface*	Center of tire*	101.8	53.9	263.5	87.8	101.8	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 135. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	31.5	-9.4	3.2	1.1	31.5	5.3
	<i>Center of tire</i>	89.3	101.9	395.1	131.7	89.3	2.9
	<i>Inner edge of tire</i>	35.8	35.8	143.3	47.8	35.8	5.5
	<i>Center between both tires</i>	17.9	2.3	25.0	8.3	17.9	9.6
2 inches Below Surface	<i>Outer edge of tire</i>	72.9	35.8	180.3	60.1	72.9	2.8
	<i>Center of tire</i>	110.1	52.7	268.1	89.4	110.1	2.1
	<i>Inner edge of tire</i>	72.4	37.1	183.6	61.2	72.4	2.9
	<i>Center between both tires</i>	15.0	4.2	27.5	9.2	15.0	11.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.6	34.2	193.3	64.4	90.6	2.3
	<i>Center of tire</i>	91.2	39.0	208.2	69.4	91.2	2.3
	<i>Inner edge of tire</i>	90.0	34.8	194.5	64.8	90.0	2.3
	<i>Center between both tires</i>	11.9	3.7	22.9	7.6	11.9	14.4
Mid AC Layer 2	<i>Outer edge of tire</i>	78.7	-7.2	57.1	19.0	78.7	2.3
	<i>Center of tire</i>	76.9	-5.7	59.8	19.9	76.9	2.3
	<i>Inner edge of tire</i>	66.8	-5.2	51.1	17.0	66.8	2.7
	<i>Center between both tires</i>	28.7	-1.0	25.8	8.6	28.7	6.0
2 inches Below Surface*	Center of tire*	110.1	52.7	268.1	89.4	110.1	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 136. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	42.4	50.3	193.2	64.4	42.4	4.9
	<i>Center of tire</i>	96.4	90.2	366.9	122.3	96.4	2.6
	<i>Inner edge of tire</i>	41.6	41.6	166.5	55.5	41.6	4.9
	<i>Center between both tires</i>	9.4	0.0	9.3	3.1	9.4	17.9
2 inches Below Surface	<i>Outer edge of tire</i>	72.4	35.0	177.4	59.1	72.4	2.9
	<i>Center of tire</i>	114.0	57.7	287.2	95.7	114.0	2.0
	<i>Inner edge of tire</i>	72.2	35.0	177.1	59.0	72.2	2.9
	<i>Center between both tires</i>	7.9	2.1	14.1	4.7	7.9	21.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	89.6	33.4	189.8	63.3	89.6	2.3
	<i>Center of tire</i>	87.5	31.4	181.6	60.5	87.5	2.4
	<i>Inner edge of tire</i>	89.4	33.8	190.6	63.5	89.4	2.3
	<i>Center between both tires</i>	6.0	1.9	11.8	3.9	6.0	28.1
Mid AC Layer 2	<i>Outer edge of tire</i>	79.3	-6.1	60.9	20.3	79.3	2.3
	<i>Center of tire</i>	77.5	-4.8	63.2	21.1	77.5	2.3
	<i>Inner edge of tire</i>	67.6	-3.8	56.2	18.7	67.6	2.7
	<i>Center between both tires</i>	28.7	-0.9	25.9	8.6	28.7	6.0
2 inches Below Surface*	Center of tire*	114.0	57.7	287.2	95.7	114.0	2.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 137. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 45 mph and 40 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	61.5	5.5	77.9	26.0	61.5	3.0
	<i>Center of tire</i>	54.7	4.0	66.8	22.3	54.7	3.3
	<i>Inner edge of tire</i>	62.8	62.8	251.3	83.8	62.8	3.6
	<i>Center between both tires</i>	54.7	13.3	94.6	31.5	54.7	3.4
2 inches Below Surface	<i>Outer edge of tire</i>	84.5	39.7	203.5	67.8	84.5	2.5
	<i>Center of tire</i>	97.6	50.9	250.4	83.5	97.6	2.3
	<i>Inner edge of tire</i>	83.7	37.6	196.6	65.5	83.7	2.5
	<i>Center between both tires</i>	45.8	13.7	86.7	28.9	45.8	4.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	93.4	40.1	213.9	71.3	93.4	2.3
	<i>Center of tire</i>	89.4	38.7	205.6	68.5	89.4	2.4
	<i>Inner edge of tire</i>	89.0	35.3	194.8	64.9	89.0	2.4
	<i>Center between both tires</i>	36.8	11.6	71.6	23.9	36.8	5.0
Mid AC Layer 2	<i>Outer edge of tire</i>	77.4	-12.4	40.2	13.4	77.4	2.3
	<i>Center of tire</i>	75.7	-10.7	43.5	14.5	75.7	2.3
	<i>Inner edge of tire</i>	65.3	-10.1	35.0	11.7	65.3	2.7
	<i>Center between both tires</i>	28.5	-2.6	20.7	6.9	28.5	6.0
Mid AC Layer 2*	Outer edge of tire*	77.4	-12.4	40.2	13.4	77.4	2.3

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 138. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	33.8	-19.9	-26.0	-8.7	33.8	4.7
	<i>Center of tire</i>	74.2	120.4	435.4	145.1	74.2	3.6
	<i>Inner edge of tire</i>	26.6	26.6	106.6	35.5	26.6	7.1
	<i>Center between both tires</i>	22.8	0.4	24.0	8.0	22.8	7.5
2 inches Below Surface	<i>Outer edge of tire</i>	79.6	38.1	193.9	64.6	79.6	2.6
	<i>Center of tire</i>	111.9	56.3	280.8	93.6	111.9	2.1
	<i>Inner edge of tire</i>	74.3	42.1	200.6	66.9	74.3	2.8
	<i>Center between both tires</i>	33.3	7.7	56.3	18.8	33.3	5.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.3	35.4	196.6	65.5	90.3	2.3
	<i>Center of tire</i>	85.4	36.1	193.6	64.5	85.4	2.5
	<i>Inner edge of tire</i>	82.2	40.0	202.1	67.4	82.2	2.6
	<i>Center between both tires</i>	19.1	2.7	27.1	9.0	19.1	9.0
Mid AC Layer 2	<i>Outer edge of tire</i>	58.4	-6.0	40.5	13.5	58.4	3.0
	<i>Center of tire</i>	53.3	-5.0	38.3	12.8	53.3	3.3
	<i>Inner edge of tire</i>	46.2	-6.1	27.9	9.3	46.2	3.7
	<i>Center between both tires</i>	43.0	-6.6	23.2	7.7	43.0	4.0
2 inches Below Surface*	Center of tire*	111.9	56.3	280.8	93.6	111.9	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 139. 3D-Move Responses for SFO Pavement Under Boeing 777-200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	43.4	51.4	197.5	65.8	43.4	4.9
	<i>Center of tire</i>	92.7	103.9	404.5	134.8	92.7	2.8
	<i>Inner edge of tire</i>	40.4	40.4	161.5	53.8	40.4	5.0
	<i>Center between both tires</i>	13.9	2.5	21.4	7.1	13.9	12.3
2 inches Below Surface	<i>Outer edge of tire</i>	78.4	34.8	182.8	60.9	78.4	2.6
	<i>Center of tire</i>	118.9	55.0	283.9	94.6	118.9	1.9
	<i>Inner edge of tire</i>	74.8	37.5	187.4	62.5	74.8	2.8
	<i>Center between both tires</i>	27.7	3.3	37.5	12.5	27.7	6.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	89.2	34.4	192.5	64.2	89.2	2.4
	<i>Center of tire</i>	85.9	38.2	200.4	66.8	85.9	2.5
	<i>Inner edge of tire</i>	83.9	37.4	196.2	65.4	83.9	2.5
	<i>Center between both tires</i>	12.7	0.4	13.9	4.6	12.7	13.3
Mid AC Layer 2	<i>Outer edge of tire</i>	59.5	-4.6	45.5	15.2	59.5	3.0
	<i>Center of tire</i>	54.1	-3.8	42.7	14.2	54.1	3.3
	<i>Inner edge of tire</i>	47.1	-4.7	33.0	11.0	47.1	3.7
	<i>Center between both tires</i>	43.9	-5.3	27.9	9.3	43.9	3.9
2 inches Below Surface*	Center of tire*	118.9	55.0	283.9	94.6	118.9	1.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Teterboro Airport (TEB)

Beechcraft King Air B200 Aircraft

Table 140. 3D-Move Responses for TEB Pavement Under Beech King Aircraft B200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	24.7	25.5	101.3	33.8	24.7	7.7
	<i>Center of tire</i>	43.3	57.5	215.9	72.0	43.3	5.0
	<i>Inner edge of tire</i>	23.9	23.9	95.6	31.9	23.9	7.9
	<i>Center between both tires</i>	3.8	1.1	7.1	2.4	3.8	43.7
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.7	15.0	88.8	29.6	43.7	4.3
	<i>Center of tire</i>	67.6	25.7	144.7	48.2	67.6	2.9
	<i>Inner edge of tire</i>	42.5	16.0	90.4	30.1	42.5	4.4
	<i>Center between both tires</i>	11.3	0.5	12.7	4.2	11.3	15.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.1	17.2	92.6	30.9	41.1	4.6
	<i>Center of tire</i>	38.6	19.9	98.4	32.8	38.6	4.9
	<i>Inner edge of tire</i>	39.2	18.1	93.4	31.1	39.2	4.8
	<i>Center between both tires</i>	5.3	-0.5	3.7	1.2	5.3	31.4
Mid AC Layer 2	<i>Outer edge of tire</i>	28.6	2.6	36.4	12.1	28.6	6.1
	<i>Center of tire</i>	25.9	3.0	34.8	11.6	25.9	6.7
	<i>Inner edge of tire</i>	21.9	2.4	29.3	9.8	21.9	7.9
	<i>Center between both tires</i>	18.3	1.8	23.7	7.9	18.3	9.4
1.5 inches Below Surface*	Center of tire*	67.6	25.7	144.7	48.2	67.6	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 141. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	25.4	24.4	98.7	32.9	25.4	7.4
	<i>Center of tire</i>	44.5	56.3	213.4	71.1	44.5	4.8
	<i>Inner edge of tire</i>	24.7	24.7	98.9	33.0	24.7	7.6
	<i>Center between both tires</i>	3.5	1.0	6.5	2.2	3.5	47.8
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	14.9	88.4	29.5	43.6	4.3
	<i>Center of tire</i>	68.1	26.2	146.8	48.9	68.1	2.9
	<i>Inner edge of tire</i>	42.5	15.8	89.9	30.0	42.5	4.4
	<i>Center between both tires</i>	11.2	0.2	11.9	4.0	11.2	15.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.0	17.5	93.6	31.2	41.0	4.6
	<i>Center of tire</i>	38.5	21.1	101.8	33.9	38.5	4.9
	<i>Inner edge of tire</i>	39.3	18.3	94.2	31.4	39.3	4.8
	<i>Center between both tires</i>	4.7	-0.4	3.6	1.2	4.7	35.4
Mid AC Layer 2	<i>Outer edge of tire</i>	28.9	2.7	37.0	12.3	28.9	6.0
	<i>Center of tire</i>	26.2	3.1	35.6	11.9	26.2	6.7
	<i>Inner edge of tire</i>	22.1	2.5	29.7	9.9	22.1	7.8
	<i>Center between both tires</i>	18.3	1.9	23.9	8.0	18.3	9.4
1.5 inches Below Surface*	Center of tire*	68.1	26.2	146.8	48.9	68.1	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 142. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	25.8	24.0	97.8	32.6	25.8	7.3
	<i>Center of tire</i>	45.1	55.4	211.3	70.4	45.1	4.7
	<i>Inner edge of tire</i>	25.2	25.2	100.8	33.6	25.2	7.5
	<i>Center between both tires</i>	3.2	0.3	4.2	1.4	3.2	52.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	14.8	87.9	29.3	43.6	4.3
	<i>Center of tire</i>	68.4	26.0	146.4	48.8	68.4	2.9
	<i>Inner edge of tire</i>	42.6	15.5	89.0	29.7	42.6	4.4
	<i>Center between both tires</i>	11.1	0.1	11.3	3.8	11.1	15.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.0	17.6	93.7	31.2	41.0	4.6
	<i>Center of tire</i>	38.7	21.5	103.0	34.3	38.7	4.9
	<i>Inner edge of tire</i>	39.4	18.3	94.2	31.4	39.4	4.8
	<i>Center between both tires</i>	4.4	0.0	4.2	1.4	4.4	38.3
Mid AC Layer 2	<i>Outer edge of tire</i>	29.0	2.8	37.4	12.5	29.0	6.0
	<i>Center of tire</i>	26.3	3.1	35.5	11.8	26.3	6.6
	<i>Inner edge of tire</i>	22.2	2.5	29.7	9.9	22.2	7.8
	<i>Center between both tires</i>	18.3	1.9	24.0	8.0	18.3	9.4
1.5 inches Below Surface*	Center of tire*	68.4	26.0	146.4	48.8	68.4	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 143. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	20.8	-11.5	-13.6	-4.5	20.8	7.8
	<i>Center of tire</i>	41.1	59.9	220.7	73.6	41.1	5.3
	<i>Inner edge of tire</i>	22.2	22.2	88.8	29.6	22.2	8.4
	<i>Center between both tires</i>	5.2	1.5	9.8	3.3	5.2	32.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	15.6	90.5	30.2	43.6	4.3
	<i>Center of tire</i>	66.4	25.7	143.4	47.8	66.4	3.0
	<i>Inner edge of tire</i>	42.1	16.8	92.5	30.8	42.1	4.4
	<i>Center between both tires</i>	11.7	1.0	14.9	5.0	11.7	14.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.2	17.1	92.6	30.9	41.2	4.5
	<i>Center of tire</i>	38.2	19.5	96.7	32.2	38.2	4.9
	<i>Inner edge of tire</i>	38.8	18.2	93.5	31.2	38.8	4.8
	<i>Center between both tires</i>	6.5	-0.6	4.8	1.6	6.5	25.9
Mid AC Layer 2	<i>Outer edge of tire</i>	28.5	2.2	35.1	11.7	28.5	6.1
	<i>Center of tire</i>	25.7	2.4	33.1	11.0	25.7	6.8
	<i>Inner edge of tire</i>	21.7	2.4	28.7	9.6	21.7	8.0
	<i>Center between both tires</i>	18.1	1.7	23.4	7.8	18.1	9.5
1.5 inches Below Surface*	Center of tire*	66.4	25.7	143.4	47.8	66.4	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 144. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	24.8	25.2	100.5	33.5	24.8	7.6
	<i>Center of tire</i>	43.6	57.2	215.2	71.7	43.6	4.9
	<i>Inner edge of tire</i>	24.0	24.0	96.1	32.0	24.0	7.8
	<i>Center between both tires</i>	4.0	1.2	7.5	2.5	4.0	41.6
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	15.1	89.0	29.7	43.6	4.3
	<i>Center of tire</i>	67.6	25.8	144.9	48.3	67.6	2.9
	<i>Inner edge of tire</i>	42.3	16.1	90.6	30.2	42.3	4.4
	<i>Center between both tires</i>	11.4	0.5	12.7	4.2	11.4	14.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.1	17.4	93.3	31.1	41.1	4.6
	<i>Center of tire</i>	38.4	20.6	100.1	33.4	38.4	4.9
	<i>Inner edge of tire</i>	39.1	18.3	94.2	31.4	39.1	4.8
	<i>Center between both tires</i>	5.3	-0.5	3.8	1.3	5.3	31.8
Mid AC Layer 2	<i>Outer edge of tire</i>	28.8	2.6	36.5	12.2	28.8	6.1
	<i>Center of tire</i>	26.1	2.9	34.8	11.6	26.1	6.7
	<i>Inner edge of tire</i>	22.0	2.6	29.7	9.9	22.0	7.9
	<i>Center between both tires</i>	18.3	1.9	24.0	8.0	18.3	9.4
1.5 inches Below Surface*	Center of tire*	67.6	25.8	144.9	48.3	67.6	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 145. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	25.5	24.3	98.5	32.8	25.5	7.4
	<i>Center of tire</i>	44.6	55.9	212.3	70.8	44.6	4.8
	<i>Inner edge of tire</i>	24.8	24.8	99.3	33.1	24.8	7.6
	<i>Center between both tires</i>	3.4	1.0	6.3	2.1	3.4	49.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	14.9	88.3	29.4	43.6	4.3
	<i>Center of tire</i>	68.2	26.2	146.7	48.9	68.2	2.9
	<i>Inner edge of tire</i>	42.5	15.8	89.8	29.9	42.5	4.4
	<i>Center between both tires</i>	11.2	0.2	11.8	3.9	11.2	15.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.0	17.5	93.7	31.2	41.0	4.6
	<i>Center of tire</i>	38.6	21.2	102.1	34.0	38.6	4.9
	<i>Inner edge of tire</i>	39.3	18.3	94.2	31.4	39.3	4.8
	<i>Center between both tires</i>	4.6	-0.3	3.6	1.2	4.6	36.0
Mid AC Layer 2	<i>Outer edge of tire</i>	28.9	2.7	37.1	12.4	28.9	6.0
	<i>Center of tire</i>	26.3	3.2	35.7	11.9	26.3	6.6
	<i>Inner edge of tire</i>	22.1	2.5	29.7	9.9	22.1	7.8
	<i>Center between both tires</i>	18.3	1.9	24.0	8.0	18.3	9.4
1.5 inches Below Surface*	Center of tire*	68.2	26.2	146.7	48.9	68.2	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 146. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	21.2	-10.5	-10.4	-3.5	21.2	7.7
	<i>Center of tire</i>	37.0	63.7	228.3	76.1	37.0	5.9
	<i>Inner edge of tire</i>	18.6	18.6	74.5	24.8	18.6	9.8
	<i>Center between both tires</i>	7.0	2.0	13.1	4.4	7.0	24.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.8	16.1	92.2	30.7	43.8	4.3
	<i>Center of tire</i>	64.6	25.9	142.3	47.4	64.6	3.1
	<i>Inner edge of tire</i>	41.8	17.7	95.0	31.7	41.8	4.5
	<i>Center between both tires</i>	12.5	1.9	18.3	6.1	12.5	13.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.4	16.6	91.0	30.3	41.4	4.5
	<i>Center of tire</i>	38.5	20.2	99.0	33.0	38.5	4.9
	<i>Inner edge of tire</i>	38.3	18.0	92.2	30.7	38.3	4.9
	<i>Center between both tires</i>	8.0	-0.5	6.5	2.2	8.0	20.9
Mid AC Layer 2	<i>Outer edge of tire</i>	28.0	1.7	33.1	11.0	28.0	6.2
	<i>Center of tire</i>	25.3	2.1	31.6	10.5	25.3	6.9
	<i>Inner edge of tire</i>	21.3	2.2	27.9	9.3	21.3	8.1
	<i>Center between both tires</i>	17.9	1.6	22.7	7.6	17.9	9.6
1.5 inches Below Surface*	Center of tire*	64.6	25.9	142.3	47.4	64.6	3.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 147. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	20.7	-11.6	-14.1	-4.7	20.7	7.9
	<i>Center of tire</i>	41.9	59.1	219.1	73.0	41.9	5.2
	<i>Inner edge of tire</i>	22.8	22.8	91.1	30.4	22.8	8.2
	<i>Center between both tires</i>	4.9	1.4	9.2	3.1	4.9	34.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	15.5	90.1	30.0	43.6	4.3
	<i>Center of tire</i>	66.8	25.4	143.1	47.7	66.8	3.0
	<i>Inner edge of tire</i>	42.2	16.6	92.1	30.7	42.2	4.4
	<i>Center between both tires</i>	11.6	0.9	14.3	4.8	11.6	14.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.2	17.3	93.0	31.0	41.2	4.6
	<i>Center of tire</i>	38.3	19.8	97.5	32.5	38.3	4.9
	<i>Inner edge of tire</i>	38.9	18.3	93.8	31.3	38.9	4.8
	<i>Center between both tires</i>	6.2	-0.6	4.5	1.5	6.2	27.2
Mid AC Layer 2	<i>Outer edge of tire</i>	28.6	2.4	35.7	11.9	28.6	6.1
	<i>Center of tire</i>	25.9	2.6	33.7	11.2	25.9	6.7
	<i>Inner edge of tire</i>	21.8	2.4	29.1	9.7	21.8	7.9
	<i>Center between both tires</i>	18.3	1.8	23.7	7.9	18.3	9.4
1.5 inches Below Surface*	Center of tire*	66.8	25.4	143.1	47.7	66.8	3.0

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 148. 3D-Move Responses for TEB Pavement Under Beechcraft King Air B200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	25.0	25.0	100.1	33.4	25.0	7.6
	<i>Center of tire</i>	43.9	56.9	214.6	71.5	43.9	4.9
	<i>Inner edge of tire</i>	24.3	24.3	97.0	32.3	24.3	7.8
	<i>Center between both tires</i>	3.9	1.1	7.3	2.4	3.9	43.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	43.6	15.1	88.9	29.6	43.6	4.3
	<i>Center of tire</i>	67.8	25.7	145.0	48.3	67.8	2.9
	<i>Inner edge of tire</i>	42.4	16.0	90.5	30.2	42.4	4.4
	<i>Center between both tires</i>	11.4	0.4	12.5	4.2	11.4	14.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	41.1	17.5	93.6	31.2	41.1	4.6
	<i>Center of tire</i>	38.5	20.7	100.4	33.5	38.5	4.9
	<i>Inner edge of tire</i>	39.2	18.4	94.4	31.5	39.2	4.8
	<i>Center between both tires</i>	5.1	-0.4	3.8	1.3	5.1	32.6
Mid AC Layer 2	<i>Outer edge of tire</i>	28.8	2.7	36.9	12.3	28.8	6.1
	<i>Center of tire</i>	26.2	3.0	35.2	11.7	26.2	6.7
	<i>Inner edge of tire</i>	22.1	2.4	29.4	9.8	22.1	7.8
	<i>Center between both tires</i>	18.4	1.9	24.2	8.1	18.4	9.3
1.5 inches Below Surface*	Center of tire*	67.8	25.7	145.0	48.3	67.8	2.9

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Bombardier CRJ 200 Aircraft

Table 149. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	38.6	43.3	168.6	56.2	38.6	5.3
	<i>Center of tire</i>	82.2	82.4	329.6	109.9	82.2	2.9
	<i>Inner edge of tire</i>	37.2	37.2	148.7	49.6	37.2	5.4
	<i>Center between both tires</i>	13.1	-1.4	8.8	2.9	13.1	12.9
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.0	29.5	154.5	51.5	66.0	3.0
	<i>Center of tire</i>	102.6	46.4	241.8	80.6	102.6	2.2
	<i>Inner edge of tire</i>	64.3	29.4	152.5	50.8	64.3	3.1
	<i>Center between both tires</i>	11.9	2.3	18.9	6.3	11.9	14.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	76.1	29.3	164.0	54.7	76.1	2.7
	<i>Center of tire</i>	73.5	34.1	175.7	58.6	73.5	2.8
	<i>Inner edge of tire</i>	73.5	30.7	165.6	55.2	73.5	2.8
	<i>Center between both tires</i>	6.7	0.1	6.9	2.3	6.7	25.1
Mid AC Layer 2	<i>Outer edge of tire</i>	74.6	6.6	94.4	31.5	74.6	2.5
	<i>Center of tire</i>	68.9	7.0	90.0	30.0	68.9	2.7
	<i>Inner edge of tire</i>	57.4	7.5	79.9	26.6	57.4	3.2
	<i>Center between both tires</i>	41.1	7.3	63.1	21.0	41.1	4.4
1.5 inches Below Surface*	Center of tire*	102.6	46.4	241.8	80.6	102.6	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 150. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.3	41.0	163.4	54.5	40.3	5.0
	<i>Center of tire</i>	84.9	79.5	323.5	107.8	84.9	2.8
	<i>Inner edge of tire</i>	39.3	39.3	157.2	52.4	39.3	5.1
	<i>Center between both tires</i>	11.9	-2.2	5.3	1.8	11.9	14.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.1	28.4	151.4	50.5	66.1	3.0
	<i>Center of tire</i>	103.0	45.9	240.6	80.2	103.0	2.1
	<i>Inner edge of tire</i>	64.9	29.4	153.2	51.1	64.9	3.1
	<i>Center between both tires</i>	10.9	1.6	15.8	5.3	10.9	15.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	75.8	29.0	162.8	54.3	75.8	2.7
	<i>Center of tire</i>	73.9	34.6	177.8	59.3	73.9	2.8
	<i>Inner edge of tire</i>	73.7	30.1	164.1	54.7	73.7	2.8
	<i>Center between both tires</i>	5.2	0.2	5.9	2.0	5.2	32.1
Mid AC Layer 2	<i>Outer edge of tire</i>	74.9	6.9	95.6	31.9	74.9	2.5
	<i>Center of tire</i>	69.2	7.0	90.1	30.0	69.2	2.7
	<i>Inner edge of tire</i>	57.9	8.2	82.5	27.5	57.9	3.2
	<i>Center between both tires</i>	41.2	7.2	62.9	21.0	41.2	4.4
1.5 inches Below Surface*	Center of tire*	103.0	45.9	240.6	80.2	103.0	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 151. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.3	39.9	161.0	53.7	41.3	4.9
	<i>Center of tire</i>	86.2	77.7	319.4	106.5	86.2	2.8
	<i>Inner edge of tire</i>	40.5	40.5	161.9	54.0	40.5	5.0
	<i>Center between both tires</i>	11.3	-2.6	3.4	1.1	11.3	14.7
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.3	27.8	149.8	49.9	66.3	3.0
	<i>Center of tire</i>	103.1	45.6	240.0	80.0	103.1	2.1
	<i>Inner edge of tire</i>	65.2	28.8	151.5	50.5	65.2	3.1
	<i>Center between both tires</i>	10.5	1.3	14.3	4.8	10.5	16.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	75.6	28.7	161.8	53.9	75.6	2.7
	<i>Center of tire</i>	74.2	34.9	178.9	59.6	74.2	2.8
	<i>Inner edge of tire</i>	73.9	29.8	163.2	54.4	73.9	2.8
	<i>Center between both tires</i>	4.5	0.3	5.4	1.8	4.5	37.4
Mid AC Layer 2	<i>Outer edge of tire</i>	75.0	7.3	96.9	32.3	75.0	2.5
	<i>Center of tire</i>	69.5	7.4	91.8	30.6	69.5	2.7
	<i>Inner edge of tire</i>	58.2	8.6	84.1	28.0	58.2	3.2
	<i>Center between both tires</i>	41.5	7.5	64.1	21.4	41.5	4.4
1.5 inches Below Surface*	Center of tire*	103.1	45.6	240.0	80.0	103.1	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 152. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	36.0	45.8	173.5	57.8	36.0	5.7
	<i>Center of tire</i>	77.9	85.7	335.1	111.7	77.9	3.1
	<i>Inner edge of tire</i>	33.9	33.9	135.5	45.2	33.9	5.8
	<i>Center between both tires</i>	15.5	-0.3	14.7	4.9	15.5	10.9
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.1	30.9	158.8	52.9	66.1	3.1
	<i>Center of tire</i>	100.5	43.4	230.7	76.9	100.5	2.2
	<i>Inner edge of tire</i>	63.8	30.8	156.1	52.0	63.8	3.2
	<i>Center between both tires</i>	13.7	3.3	23.7	7.9	13.7	12.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	76.6	29.6	165.5	55.2	76.6	2.7
	<i>Center of tire</i>	73.4	33.3	173.4	57.8	73.4	2.8
	<i>Inner edge of tire</i>	73.3	31.3	167.3	55.8	73.3	2.8
	<i>Center between both tires</i>	8.8	0.0	8.9	3.0	8.8	19.1
Mid AC Layer 2	<i>Outer edge of tire</i>	74.2	6.0	92.1	30.7	74.2	2.5
	<i>Center of tire</i>	68.2	6.0	86.2	28.7	68.2	2.7
	<i>Inner edge of tire</i>	56.6	6.7	76.6	25.5	56.6	3.2
	<i>Center between both tires</i>	40.9	7.3	62.8	20.9	40.9	4.4
1.5 inches Below Surface*	Center of tire*	100.5	43.4	230.7	76.9	100.5	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 153. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.1	42.8	167.4	55.8	39.1	5.2
	<i>Center of tire</i>	83.0	81.6	327.9	109.3	83.0	2.9
	<i>Inner edge of tire</i>	37.8	37.8	151.4	50.5	37.8	5.3
	<i>Center between both tires</i>	12.7	-1.7	7.7	2.6	12.7	13.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.1	29.2	153.6	51.2	66.1	3.0
	<i>Center of tire</i>	102.8	46.2	241.4	80.5	102.8	2.1
	<i>Inner edge of tire</i>	64.4	29.1	151.9	50.6	64.4	3.1
	<i>Center between both tires</i>	11.6	2.1	18.0	6.0	11.6	14.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	76.0	29.2	163.6	54.5	76.0	2.7
	<i>Center of tire</i>	73.6	34.2	176.2	58.7	73.6	2.8
	<i>Inner edge of tire</i>	73.6	30.5	165.2	55.1	73.6	2.8
	<i>Center between both tires</i>	6.3	0.1	6.6	2.2	6.3	26.7
Mid AC Layer 2	<i>Outer edge of tire</i>	74.7	6.8	95.1	31.7	74.7	2.5
	<i>Center of tire</i>	69.1	7.2	90.8	30.3	69.1	2.7
	<i>Inner edge of tire</i>	57.6	7.7	80.7	26.9	57.6	3.2
	<i>Center between both tires</i>	41.1	7.4	63.2	21.1	41.1	4.4
1.5 inches Below Surface*	Center of tire*	102.8	46.2	241.4	80.5	102.8	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 154. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.6	40.8	162.9	54.3	40.6	5.0
	<i>Center of tire</i>	85.2	79.2	322.8	107.6	85.2	2.8
	<i>Inner edge of tire</i>	39.6	39.6	158.4	52.8	39.6	5.1
	<i>Center between both tires</i>	11.8	-2.3	4.9	1.6	11.8	14.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.2	28.3	151.1	50.4	66.2	3.0
	<i>Center of tire</i>	103.1	45.8	240.5	80.2	103.1	2.1
	<i>Inner edge of tire</i>	65.0	29.3	152.9	51.0	65.0	3.1
	<i>Center between both tires</i>	10.8	1.5	15.4	5.1	10.8	15.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	75.7	29.0	162.6	54.2	75.7	2.7
	<i>Center of tire</i>	74.0	34.7	178.0	59.3	74.0	2.8
	<i>Inner edge of tire</i>	73.8	30.1	163.9	54.6	73.8	2.8
	<i>Center between both tires</i>	5.0	0.2	5.7	1.9	5.0	33.2
Mid AC Layer 2	<i>Outer edge of tire</i>	74.9	7.0	96.0	32.0	74.9	2.5
	<i>Center of tire</i>	69.3	7.1	90.5	30.2	69.3	2.7
	<i>Inner edge of tire</i>	58.0	8.3	82.9	27.6	58.0	3.2
	<i>Center between both tires</i>	41.3	7.3	63.2	21.1	41.3	4.4
1.5 inches Below Surface*	Center of tire*	103.1	45.8	240.5	80.2	103.1	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 155. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	29.8	-13.3	-10.2	-3.4	29.8	5.5
	<i>Center of tire</i>	69.7	93.3	349.4	116.5	69.7	3.5
	<i>Inner edge of tire</i>	22.9	22.9	91.8	30.6	22.9	8.2
	<i>Center between both tires</i>	20.9	1.2	24.6	8.2	20.9	8.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.3	32.3	163.2	54.4	66.3	3.1
	<i>Center of tire</i>	98.7	45.8	236.1	78.7	98.7	2.2
	<i>Inner edge of tire</i>	62.9	32.2	159.6	53.2	62.9	3.2
	<i>Center between both tires</i>	17.5	5.0	32.5	10.8	17.5	9.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	77.6	30.1	168.0	56.0	77.6	2.6
	<i>Center of tire</i>	75.4	38.4	190.4	63.5	75.4	2.8
	<i>Inner edge of tire</i>	72.9	31.7	168.1	56.0	72.9	2.8
	<i>Center between both tires</i>	12.4	0.3	13.2	4.4	12.4	13.7
Mid AC Layer 2	<i>Outer edge of tire</i>	73.4	4.8	87.9	29.3	73.4	2.5
	<i>Center of tire</i>	67.1	4.6	80.9	27.0	67.1	2.8
	<i>Inner edge of tire</i>	55.7	6.0	73.6	24.5	55.7	3.3
	<i>Center between both tires</i>	40.6	6.8	61.0	20.3	40.6	4.4
1.5 inches Below Surface*	Center of tire*	98.7	45.8	236.1	78.7	98.7	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 156. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	37.0	45.1	172.2	57.4	37.0	5.6
	<i>Center of tire</i>	79.6	84.8	334.0	111.3	79.6	3.0
	<i>Inner edge of tire</i>	35.1	35.1	140.3	46.8	35.1	5.6
	<i>Center between both tires</i>	14.6	-0.6	12.9	4.3	14.6	11.6
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.0	30.5	157.4	52.5	66.0	3.1
	<i>Center of tire</i>	100.9	43.0	230.0	76.7	100.9	2.2
	<i>Inner edge of tire</i>	64.0	30.3	154.9	51.6	64.0	3.1
	<i>Center between both tires</i>	13.1	3.0	22.0	7.3	13.1	13.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	76.4	29.6	165.1	55.0	76.4	2.7
	<i>Center of tire</i>	73.4	33.5	174.0	58.0	73.4	2.8
	<i>Inner edge of tire</i>	73.4	31.1	166.8	55.6	73.4	2.8
	<i>Center between both tires</i>	8.1	-0.1	7.9	2.6	8.1	20.7
Mid AC Layer 2	<i>Outer edge of tire</i>	74.3	6.2	92.8	30.9	74.3	2.5
	<i>Center of tire</i>	68.6	6.5	88.0	29.3	68.6	2.7
	<i>Inner edge of tire</i>	57.1	7.0	78.2	26.1	57.1	3.2
	<i>Center between both tires</i>	41.3	7.4	63.7	21.2	41.3	4.4
1.5 inches Below Surface*	Center of tire*	100.9	43.0	230.0	76.7	100.9	2.2

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 157. 3D-Move Responses for TEB Pavement Under Bombardier CRJ 200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.5	42.2	166.1	55.4	39.5	5.2
	<i>Center of tire</i>	83.6	81.0	326.7	108.9	83.6	2.9
	<i>Inner edge of tire</i>	38.3	38.3	153.2	51.1	38.3	5.2
	<i>Center between both tires</i>	12.5	-1.8	7.1	2.4	12.5	13.4
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.1	29.0	153.1	51.0	66.1	3.0
	<i>Center of tire</i>	103.1	46.1	241.4	80.5	103.1	2.1
	<i>Inner edge of tire</i>	64.5	29.0	151.5	50.5	64.5	3.1
	<i>Center between both tires</i>	11.4	2.0	17.5	5.8	11.4	14.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	75.9	29.2	163.6	54.5	75.9	2.7
	<i>Center of tire</i>	73.8	34.2	176.4	58.8	73.8	2.8
	<i>Inner edge of tire</i>	73.7	30.5	165.1	55.0	73.7	2.8
	<i>Center between both tires</i>	6.0	0.1	6.3	2.1	6.0	28.0
Mid AC Layer 2	<i>Outer edge of tire</i>	74.8	6.8	95.1	31.7	74.8	2.5
	<i>Center of tire</i>	69.4	7.5	92.0	30.7	69.4	2.7
	<i>Inner edge of tire</i>	57.9	7.9	81.8	27.3	57.9	3.2
	<i>Center between both tires</i>	41.5	7.5	63.8	21.3	41.5	4.4
1.5 inches Below Surface*	Center of tire*	103.1	46.1	241.4	80.5	103.1	2.1

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Gulfstream G600 Aircraft

Table 158. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	40.8	53.7	201.8	67.3	40.8	5.2
	<i>Center of tire</i>	96.5	99.1	393.8	131.3	96.5	2.6
	<i>Inner edge of tire</i>	37.4	37.4	149.5	49.8	37.4	5.4
	<i>Center between both tires</i>	21.6	0.7	23.7	7.9	21.6	8.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.6	36.4	182.7	60.9	73.6	2.8
	<i>Center of tire</i>	114.9	56.3	283.8	94.6	114.9	2.0
	<i>Inner edge of tire</i>	71.0	38.7	187.2	62.4	71.0	2.9
	<i>Center between both tires</i>	22.0	3.8	33.5	11.2	22.0	7.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	93.0	35.5	199.5	66.5	93.0	2.3
	<i>Center of tire</i>	90.8	38.0	204.6	68.2	90.8	2.3
	<i>Inner edge of tire</i>	88.0	37.4	200.3	66.8	88.0	2.4
	<i>Center between both tires</i>	11.3	0.2	11.8	3.9	11.3	15.0
Mid AC Layer 2	<i>Outer edge of tire</i>	115.8	10.0	145.8	48.6	115.8	1.7
	<i>Center of tire</i>	108.3	11.3	142.3	47.4	108.3	1.8
	<i>Inner edge of tire</i>	90.7	13.2	130.4	43.5	90.7	2.2
	<i>Center between both tires</i>	73.5	13.9	115.2	38.4	73.5	2.6
Mid AC Layer 2*	Outer edge of tire*	115.8	10.0	145.8	48.6	115.8	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 159. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.0	51.5	197.5	65.8	43.0	4.9
	<i>Center of tire</i>	99.3	95.0	384.5	128.2	99.3	2.5
	<i>Inner edge of tire</i>	40.4	40.4	161.6	53.9	40.4	5.0
	<i>Center between both tires</i>	19.1	-0.7	17.0	5.7	19.1	8.9
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.8	35.4	179.9	60.0	73.8	2.8
	<i>Center of tire</i>	117.2	61.8	302.7	100.9	117.2	2.0
	<i>Inner edge of tire</i>	71.6	37.4	183.8	61.3	71.6	2.9
	<i>Center between both tires</i>	20.0	2.6	27.9	9.3	20.0	8.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.4	34.8	196.7	65.6	92.4	2.3
	<i>Center of tire</i>	91.1	37.8	204.7	68.2	91.1	2.3
	<i>Inner edge of tire</i>	88.6	37.1	199.9	66.6	88.6	2.4
	<i>Center between both tires</i>	8.8	0.4	10.1	3.4	8.8	19.2
Mid AC Layer 2	<i>Outer edge of tire</i>	116.3	11.1	149.7	49.9	116.3	1.7
	<i>Center of tire</i>	108.6	11.0	141.7	47.2	108.6	1.8
	<i>Inner edge of tire</i>	91.7	14.3	134.8	44.9	91.7	2.1
	<i>Center between both tires</i>	73.6	13.7	114.6	38.2	73.6	2.6
Mid AC Layer 2*	Outer edge of tire*	116.3	11.1	149.7	49.9	116.3	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 160. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.3	50.1	194.7	64.9	44.3	4.7
	<i>Center of tire</i>	101.0	93.5	381.6	127.2	101.0	2.5
	<i>Inner edge of tire</i>	42.1	42.1	168.5	56.2	42.1	4.9
	<i>Center between both tires</i>	18.0	-1.6	13.3	4.4	18.0	9.4
1.5 inches Below Surface	<i>Outer edge of tire</i>	74.3	35.9	181.9	60.6	74.3	2.8
	<i>Center of tire</i>	117.4	61.6	302.1	100.7	117.4	2.0
	<i>Inner edge of tire</i>	72.3	38.0	186.4	62.1	72.3	2.9
	<i>Center between both tires</i>	19.1	2.0	25.0	8.3	19.1	9.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.2	34.3	195.1	65.0	92.2	2.3
	<i>Center of tire</i>	91.5	37.7	204.7	68.2	91.5	2.3
	<i>Inner edge of tire</i>	88.9	36.4	198.1	66.0	88.9	2.4
	<i>Center between both tires</i>	7.6	0.6	9.2	3.1	7.6	22.3
Mid AC Layer 2	<i>Outer edge of tire</i>	116.3	11.0	149.4	49.8	116.3	1.7
	<i>Center of tire</i>	109.0	11.8	144.4	48.1	109.0	1.8
	<i>Inner edge of tire</i>	91.9	13.9	133.5	44.5	91.9	2.1
	<i>Center between both tires</i>	74.0	13.5	114.6	38.2	74.0	2.6
Mid AC Layer 2*	Outer edge of tire*	116.3	11.0	149.4	49.8	116.3	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 161. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	29.2	-11.9	-6.6	-2.2	29.2	5.6
	<i>Center of tire</i>	92.0	105.8	409.5	136.5	92.0	2.8
	<i>Inner edge of tire</i>	33.1	33.1	132.2	44.1	33.1	5.9
	<i>Center between both tires</i>	26.4	2.4	33.5	11.2	26.4	6.6
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.4	38.0	187.4	62.5	73.4	2.8
	<i>Center of tire</i>	114.5	57.3	286.3	95.4	114.5	2.0
	<i>Inner edge of tire</i>	69.9	38.9	186.5	62.2	69.9	3.0
	<i>Center between both tires</i>	25.3	5.7	42.2	14.1	25.3	7.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	93.9	36.5	203.4	67.8	93.9	2.3
	<i>Center of tire</i>	92.6	39.6	211.3	70.4	92.6	2.3
	<i>Inner edge of tire</i>	86.8	34.3	189.6	63.2	86.8	2.4
	<i>Center between both tires</i>	14.8	-0.2	14.3	4.8	14.8	11.5
Mid AC Layer 2	<i>Outer edge of tire</i>	115.3	9.2	142.8	47.6	115.3	1.7
	<i>Center of tire</i>	107.2	9.7	136.3	45.4	107.2	1.8
	<i>Inner edge of tire</i>	89.4	11.8	124.9	41.6	89.4	2.2
	<i>Center between both tires</i>	73.2	13.3	113.0	37.7	73.2	2.6
Mid AC Layer 2*	Outer edge of tire*	115.3	9.2	142.8	47.6	115.3	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 162. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.5	52.9	200.2	66.7	41.5	5.1
	<i>Center of tire</i>	97.5	98.1	391.8	130.6	97.5	2.6
	<i>Inner edge of tire</i>	38.3	38.3	153.2	51.1	38.3	5.2
	<i>Center between both tires</i>	20.8	0.4	22.0	7.3	20.8	8.3
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.6	36.1	181.8	60.6	73.6	2.8
	<i>Center of tire</i>	115.0	56.1	283.4	94.5	115.0	2.0
	<i>Inner edge of tire</i>	71.2	38.3	186.1	62.0	71.2	2.9
	<i>Center between both tires</i>	21.4	3.5	31.9	10.6	21.4	8.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.8	35.3	198.7	66.2	92.8	2.3
	<i>Center of tire</i>	90.8	37.9	204.6	68.2	90.8	2.3
	<i>Inner edge of tire</i>	88.2	37.5	200.6	66.9	88.2	2.4
	<i>Center between both tires</i>	10.5	0.1	10.7	3.6	10.5	16.0
Mid AC Layer 2	<i>Outer edge of tire</i>	115.9	10.3	147.0	49.0	115.9	1.7
	<i>Center of tire</i>	108.0	10.1	138.3	46.1	108.0	1.8
	<i>Inner edge of tire</i>	91.1	13.5	131.6	43.9	91.1	2.2
	<i>Center between both tires</i>	73.6	13.9	115.3	38.4	73.6	2.6
Mid AC Layer 2*	Outer edge of tire*	115.9	10.3	147.0	49.0	115.9	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 163. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.4	51.1	196.7	65.6	43.4	4.9
	<i>Center of tire</i>	99.8	94.6	383.6	127.9	99.8	2.5
	<i>Inner edge of tire</i>	40.8	40.8	163.4	54.5	40.8	5.0
	<i>Center between both tires</i>	18.8	-0.9	16.2	5.4	18.8	9.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.8	35.2	179.6	59.9	73.8	2.8
	<i>Center of tire</i>	117.3	61.7	302.6	100.9	117.3	2.0
	<i>Inner edge of tire</i>	71.6	37.2	183.4	61.1	71.6	2.9
	<i>Center between both tires</i>	19.8	2.5	27.2	9.1	19.8	8.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.4	34.7	196.4	65.5	92.4	2.3
	<i>Center of tire</i>	91.2	37.8	204.6	68.2	91.2	2.3
	<i>Inner edge of tire</i>	88.6	36.9	199.4	66.5	88.6	2.4
	<i>Center between both tires</i>	8.5	0.4	9.5	3.2	8.5	19.9
Mid AC Layer 2	<i>Outer edge of tire</i>	116.4	11.2	150.2	50.1	116.4	1.7
	<i>Center of tire</i>	108.7	11.2	142.3	47.4	108.7	1.8
	<i>Inner edge of tire</i>	91.9	14.5	135.3	45.1	91.9	2.1
	<i>Center between both tires</i>	73.8	13.8	115.0	38.3	73.8	2.6
Mid AC Layer 2*	Outer edge of tire*	116.4	11.2	150.2	50.1	116.4	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 164. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	31.7	-18.9	-24.9	-8.3	31.7	5.1
	<i>Center of tire</i>	82.4	118.0	436.5	145.5	82.4	3.2
	<i>Inner edge of tire</i>	29.6	29.6	118.5	39.5	29.6	6.5
	<i>Center between both tires</i>	36.3	5.1	51.6	17.2	36.3	4.9
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.0	39.3	191.1	63.7	73.0	2.9
	<i>Center of tire</i>	109.6	53.0	268.5	89.5	109.6	2.1
	<i>Inner edge of tire</i>	68.5	40.5	190.1	63.4	68.5	3.1
	<i>Center between both tires</i>	32.3	8.6	58.2	19.4	32.3	5.6
Bottom AC Layer 1	<i>Outer edge of tire</i>	95.9	37.7	209.1	69.7	95.9	2.2
	<i>Center of tire</i>	96.3	40.9	219.1	73.0	96.3	2.2
	<i>Inner edge of tire</i>	85.8	29.9	175.5	58.5	85.8	2.4
	<i>Center between both tires</i>	20.9	0.6	22.6	7.5	20.9	8.2
Mid AC Layer 2	<i>Outer edge of tire</i>	114.4	7.5	136.9	45.6	114.4	1.7
	<i>Center of tire</i>	105.6	7.5	128.1	42.7	105.6	1.8
	<i>Inner edge of tire</i>	87.7	9.8	117.2	39.1	87.7	2.2
	<i>Center between both tires</i>	73.0	13.0	111.9	37.3	73.0	2.6
Mid AC Layer 2*	Outer edge of tire*	114.4	7.5	136.9	45.6	114.4	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 165. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.8	55.7	205.9	68.6	38.8	5.5
	<i>Center of tire</i>	93.9	103.9	405.7	135.2	93.9	2.7
	<i>Inner edge of tire</i>	34.6	34.6	138.4	46.1	34.6	5.7
	<i>Center between both tires</i>	24.8	1.8	30.2	10.1	24.8	7.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.4	37.4	185.8	61.9	73.4	2.8
	<i>Center of tire</i>	115.0	56.8	285.4	95.1	115.0	2.0
	<i>Inner edge of tire</i>	70.1	38.2	184.6	61.5	70.1	3.0
	<i>Center between both tires</i>	24.1	5.0	39.2	13.1	24.1	7.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	93.6	36.2	202.3	67.4	93.6	2.3
	<i>Center of tire</i>	92.0	39.4	210.2	70.1	92.0	2.3
	<i>Inner edge of tire</i>	87.1	35.4	193.2	64.4	87.1	2.4
	<i>Center between both tires</i>	13.6	-0.1	13.3	4.4	13.6	12.4
Mid AC Layer 2	<i>Outer edge of tire</i>	115.4	9.3	143.4	47.8	115.4	1.7
	<i>Center of tire</i>	108.0	10.4	139.2	46.4	108.0	1.8
	<i>Inner edge of tire</i>	90.3	12.5	127.7	42.6	90.3	2.2
	<i>Center between both tires</i>	73.9	13.5	114.5	38.2	73.9	2.6
Mid AC Layer 2*	Outer edge of tire*	115.4	9.3	143.4	47.8	115.4	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 166. 3D-Move Responses for TEB Pavement Under Gulfstream G600 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.9	52.4	199.1	66.4	41.9	5.0
	<i>Center of tire</i>	97.9	96.5	387.4	129.1	97.9	2.6
	<i>Inner edge of tire</i>	38.9	38.9	155.6	51.9	38.9	5.2
	<i>Center between both tires</i>	20.3	0.2	20.9	7.0	20.3	8.4
1.5 inches Below Surface	<i>Outer edge of tire</i>	73.7	35.9	181.4	60.5	73.7	2.8
	<i>Center of tire</i>	115.2	56.1	283.5	94.5	115.2	2.0
	<i>Inner edge of tire</i>	71.3	38.1	185.6	61.9	71.3	2.9
	<i>Center between both tires</i>	21.0	3.3	30.9	10.3	21.0	8.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.7	35.2	198.4	66.1	92.7	2.3
	<i>Center of tire</i>	91.0	37.8	204.3	68.1	91.0	2.3
	<i>Inner edge of tire</i>	88.3	37.5	200.9	67.0	88.3	2.4
	<i>Center between both tires</i>	10.1	0.2	10.6	3.5	10.1	16.8
Mid AC Layer 2	<i>Outer edge of tire</i>	116.3	10.9	148.9	49.6	116.3	1.7
	<i>Center of tire</i>	108.7	10.5	140.2	46.7	108.7	1.8
	<i>Inner edge of tire</i>	91.8	13.9	133.5	44.5	91.8	2.1
	<i>Center between both tires</i>	74.2	14.1	116.5	38.8	74.2	2.6
Mid AC Layer 2*	Outer edge of tire*	116.3	10.9	148.9	49.6	116.3	1.7

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

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Table 167. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	41.3	62.9	230.0	76.7	41.3	5.3
	<i>Center of tire</i>	103.9	109.2	431.4	143.8	103.9	2.5
	<i>Inner edge of tire</i>	39.8	39.8	159.2	53.1	39.8	5.1
	<i>Center between both tires</i>	15.4	0.7	17.5	5.8	15.4	11.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	75.9	41.9	201.5	67.2	75.9	2.8
	<i>Center of tire</i>	124.6	73.0	343.7	114.6	124.6	2.0
	<i>Inner edge of tire</i>	76.1	45.0	211.2	70.4	76.1	2.8
	<i>Center between both tires</i>	12.0	2.8	20.5	6.8	12.0	14.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	103.3	40.4	224.5	74.8	103.3	2.1
	<i>Center of tire</i>	99.7	33.7	200.9	67.0	99.7	2.1
	<i>Inner edge of tire</i>	102.0	41.4	226.1	75.4	102.0	2.1
	<i>Center between both tires</i>	8.3	2.4	15.6	5.2	8.3	20.5
Mid AC Layer 2	<i>Outer edge of tire</i>	151.9	13.3	191.7	63.9	151.9	1.4
	<i>Center of tire</i>	146.4	13.4	186.6	62.2	146.4	1.4
	<i>Inner edge of tire</i>	131.0	18.2	185.6	61.9	131.0	1.6
	<i>Center between both tires</i>	67.0	19.5	125.5	41.8	67.0	2.9
Mid AC Layer 2*	Outer edge of tire*	151.9	13.3	191.7	63.9	151.9	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 168. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.5	60.4	224.8	74.9	43.5	5.0
	<i>Center of tire</i>	106.5	108.3	431.4	143.8	106.5	2.5
	<i>Inner edge of tire</i>	42.6	42.6	170.4	56.8	42.6	4.8
	<i>Center between both tires</i>	10.5	-0.1	10.2	3.4	10.5	16.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	76.6	42.9	205.3	68.4	76.6	2.8
	<i>Center of tire</i>	124.3	73.1	343.7	114.6	124.3	2.0
	<i>Inner edge of tire</i>	76.6	43.6	207.5	69.2	76.6	2.8
	<i>Center between both tires</i>	8.3	2.1	14.6	4.9	8.3	20.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.6	39.2	220.2	73.4	102.6	2.1
	<i>Center of tire</i>	99.5	32.9	198.1	66.0	99.5	2.1
	<i>Inner edge of tire</i>	101.8	40.1	222.1	74.0	101.8	2.1
	<i>Center between both tires</i>	5.5	1.9	11.1	3.7	5.5	30.7
Mid AC Layer 2	<i>Outer edge of tire</i>	152.1	13.5	192.7	64.2	152.1	1.4
	<i>Center of tire</i>	146.1	12.6	183.7	61.2	146.1	1.4
	<i>Inner edge of tire</i>	132.3	19.6	191.2	63.7	132.3	1.6
	<i>Center between both tires</i>	66.9	19.5	125.4	41.8	66.9	2.9
Mid AC Layer 2*	Outer edge of tire*	152.1	13.5	192.7	64.2	152.1	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 169. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	44.8	58.9	221.7	73.9	44.8	4.8
	<i>Center of tire</i>	107.8	107.0	428.8	142.9	107.8	2.4
	<i>Inner edge of tire</i>	44.3	44.3	177.2	59.1	44.3	4.7
	<i>Center between both tires</i>	7.9	-0.6	6.1	2.0	7.9	21.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	76.8	42.3	203.6	67.9	76.8	2.8
	<i>Center of tire</i>	124.1	73.2	343.6	114.5	124.1	2.0
	<i>Inner edge of tire</i>	76.9	42.9	205.5	68.5	76.9	2.8
	<i>Center between both tires</i>	6.3	1.7	11.2	3.7	6.3	27.0
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.2	38.5	217.7	72.6	102.2	2.1
	<i>Center of tire</i>	99.6	32.3	196.6	65.5	99.6	2.1
	<i>Inner edge of tire</i>	101.8	39.2	219.5	73.2	101.8	2.1
	<i>Center between both tires</i>	4.0	1.5	8.5	2.8	4.0	42.0
Mid AC Layer 2	<i>Outer edge of tire</i>	152.5	14.4	195.7	65.2	152.5	1.4
	<i>Center of tire</i>	146.7	13.6	187.5	62.5	146.7	1.4
	<i>Inner edge of tire</i>	133.0	20.5	194.4	64.8	133.0	1.6
	<i>Center between both tires</i>	67.2	20.1	127.4	42.5	67.2	2.9
Mid AC Layer 2*	Outer edge of tire*	152.5	14.4	195.7	65.2	152.5	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 170. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.4	66.2	237.0	79.0	38.4	5.7
	<i>Center of tire</i>	99.4	112.3	436.4	145.5	99.4	2.7
	<i>Inner edge of tire</i>	35.3	35.3	141.2	47.1	35.3	5.6
	<i>Center between both tires</i>	21.9	1.8	27.2	9.1	21.9	7.9
1.5 inches Below Surface	<i>Outer edge of tire</i>	75.9	43.6	206.8	68.9	75.9	2.8
	<i>Center of tire</i>	121.0	64.6	314.9	105.0	121.0	2.0
	<i>Inner edge of tire</i>	75.0	44.9	209.8	69.9	75.0	2.9
	<i>Center between both tires</i>	17.1	3.8	28.4	9.5	17.1	10.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.8	36.2	211.4	70.5	102.8	2.1
	<i>Center of tire</i>	102.1	32.9	200.8	66.9	102.1	2.1
	<i>Inner edge of tire</i>	102.4	42.5	230.0	76.7	102.4	2.1
	<i>Center between both tires</i>	12.1	3.2	21.8	7.3	12.1	14.2
Mid AC Layer 2	<i>Outer edge of tire</i>	150.8	11.3	184.7	61.6	150.8	1.4
	<i>Center of tire</i>	144.9	11.3	178.7	59.6	144.9	1.4
	<i>Inner edge of tire</i>	129.4	16.4	178.5	59.5	129.4	1.6
	<i>Center between both tires</i>	67.0	18.9	123.6	41.2	67.0	2.9
Mid AC Layer 2*	Outer edge of tire*	150.8	11.3	184.7	61.6	150.8	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 171. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	42.0	62.1	228.3	76.1	42.0	5.2
	<i>Center of tire</i>	104.7	108.3	429.8	143.3	104.7	2.5
	<i>Inner edge of tire</i>	40.7	40.7	162.7	54.2	40.7	5.0
	<i>Center between both tires</i>	14.0	0.5	15.5	5.2	14.0	12.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	75.9	41.5	200.5	66.8	75.9	2.8
	<i>Center of tire</i>	124.7	72.9	343.5	114.5	124.7	2.0
	<i>Inner edge of tire</i>	76.3	44.6	210.0	70.0	76.3	2.8
	<i>Center between both tires</i>	11.0	2.6	18.9	6.3	11.0	15.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	103.0	40.1	223.3	74.4	103.0	2.1
	<i>Center of tire</i>	99.5	33.5	200.0	66.7	99.5	2.1
	<i>Inner edge of tire</i>	101.9	41.0	224.9	75.0	101.9	2.1
	<i>Center between both tires</i>	7.5	2.3	14.4	4.8	7.5	22.5
Mid AC Layer 2	<i>Outer edge of tire</i>	151.5	12.5	189.0	63.0	151.5	1.4
	<i>Center of tire</i>	146.8	13.9	188.4	62.8	146.8	1.4
	<i>Inner edge of tire</i>	131.4	18.6	187.2	62.4	131.4	1.6
	<i>Center between both tires</i>	67.1	19.5	125.7	41.9	67.1	2.9
Mid AC Layer 2*	Outer edge of tire*	151.5	12.5	189.0	63.0	151.5	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 172. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	43.8	60.1	224.0	74.7	43.8	5.0
	<i>Center of tire</i>	106.9	107.9	430.7	143.6	106.9	2.5
	<i>Inner edge of tire</i>	43.0	43.0	172.1	57.4	43.0	4.8
	<i>Center between both tires</i>	9.9	-0.2	9.2	3.1	9.9	17.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	76.7	42.8	204.9	68.3	76.7	2.8
	<i>Center of tire</i>	124.3	73.1	343.7	114.6	124.3	2.0
	<i>Inner edge of tire</i>	76.7	43.4	207.0	69.0	76.7	2.8
	<i>Center between both tires</i>	7.8	2.0	13.8	4.6	7.8	21.7
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.5	39.0	219.6	73.2	102.5	2.1
	<i>Center of tire</i>	99.5	32.7	197.7	65.9	99.5	2.1
	<i>Inner edge of tire</i>	101.8	39.9	221.5	73.8	101.8	2.1
	<i>Center between both tires</i>	5.2	1.8	10.5	3.5	5.2	32.7
Mid AC Layer 2	<i>Outer edge of tire</i>	152.2	13.8	193.6	64.5	152.2	1.4
	<i>Center of tire</i>	146.3	12.8	184.7	61.6	146.3	1.4
	<i>Inner edge of tire</i>	132.5	19.9	192.1	64.0	132.5	1.6
	<i>Center between both tires</i>	67.0	19.5	125.6	41.9	67.0	2.9
Mid AC Layer 2*	Outer edge of tire*	152.2	13.8	193.6	64.5	152.2	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 173. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	32.2	-19.5	-26.2	-8.7	32.2	5.0
	<i>Center of tire</i>	89.5	122.7	457.6	152.5	89.5	3.0
	<i>Inner edge of tire</i>	36.9	36.9	147.7	49.2	36.9	5.4
	<i>Center between both tires</i>	33.1	4.5	46.7	15.6	33.1	5.3
1.5 inches Below Surface	<i>Outer edge of tire</i>	75.5	44.4	208.7	69.6	75.5	2.8
	<i>Center of tire</i>	120.0	67.2	321.8	107.3	120.0	2.0
	<i>Inner edge of tire</i>	73.7	46.3	212.8	70.9	73.7	2.9
	<i>Center between both tires</i>	25.7	5.6	42.5	14.2	25.7	6.8
Bottom AC Layer 1	<i>Outer edge of tire</i>	105.1	35.4	211.3	70.4	105.1	2.0
	<i>Center of tire</i>	107.8	34.2	210.3	70.1	107.8	2.0
	<i>Inner edge of tire</i>	101.2	34.7	205.2	68.4	101.2	2.1
	<i>Center between both tires</i>	18.6	4.7	32.8	10.9	18.6	9.3
Mid AC Layer 2	<i>Outer edge of tire</i>	150.0	9.4	178.3	59.4	150.0	1.4
	<i>Center of tire</i>	143.0	8.5	168.4	56.1	143.0	1.4
	<i>Inner edge of tire</i>	127.2	13.8	168.7	56.2	127.2	1.6
	<i>Center between both tires</i>	67.2	17.8	120.5	40.2	67.2	2.9
Mid AC Layer 2*	Outer edge of tire*	150.0	9.4	178.3	59.4	150.0	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 174. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.4	64.8	233.9	78.0	39.4	5.6
	<i>Center of tire</i>	101.4	111.7	436.4	145.5	101.4	2.6
	<i>Inner edge of tire</i>	37.1	37.1	148.3	49.4	37.1	5.4
	<i>Center between both tires</i>	19.9	1.5	24.3	8.1	19.9	8.6
1.5 inches Below Surface	<i>Outer edge of tire</i>	75.9	43.0	204.9	68.3	75.9	2.8
	<i>Center of tire</i>	124.8	73.2	344.5	114.8	124.8	2.0
	<i>Inner edge of tire</i>	75.2	44.2	207.7	69.2	75.2	2.8
	<i>Center between both tires</i>	15.5	3.5	26.1	8.7	15.5	11.1
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.2	35.9	210.0	70.0	102.2	2.1
	<i>Center of tire</i>	101.0	32.8	199.5	66.5	101.0	2.1
	<i>Inner edge of tire</i>	102.3	42.3	229.1	76.4	102.3	2.1
	<i>Center between both tires</i>	10.9	3.0	19.9	6.6	10.9	15.6
Mid AC Layer 2	<i>Outer edge of tire</i>	151.6	12.4	188.8	62.9	151.6	1.4
	<i>Center of tire</i>	146.1	12.2	182.7	60.9	146.1	1.4
	<i>Inner edge of tire</i>	130.5	17.4	182.6	60.9	130.5	1.6
	<i>Center between both tires</i>	68.0	19.2	125.7	41.9	68.0	2.9
Mid AC Layer 2*	Outer edge of tire*	151.6	12.4	188.8	62.9	151.6	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 175. 3D-Move Responses for TEB Pavement Under Boeing 737 MAX 8 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	42.4	61.6	227.2	75.7	42.4	5.1
	<i>Center of tire</i>	105.2	107.8	428.7	142.9	105.2	2.5
	<i>Inner edge of tire</i>	41.2	41.2	164.7	54.9	41.2	4.9
	<i>Center between both tires</i>	13.2	0.3	14.3	4.8	13.2	12.8
1.5 inches Below Surface	<i>Outer edge of tire</i>	76.0	41.4	200.1	66.7	76.0	2.8
	<i>Center of tire</i>	124.9	73.0	343.8	114.6	124.9	2.0
	<i>Inner edge of tire</i>	76.3	44.4	209.5	69.8	76.3	2.8
	<i>Center between both tires</i>	10.3	2.5	18.0	6.0	10.3	16.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	102.9	39.9	222.7	74.2	102.9	2.1
	<i>Center of tire</i>	99.5	33.2	199.2	66.4	99.5	2.1
	<i>Inner edge of tire</i>	101.9	40.9	224.6	74.9	101.9	2.1
	<i>Center between both tires</i>	7.0	2.2	13.6	4.5	7.0	24.1
Mid AC Layer 2	<i>Outer edge of tire</i>	152.1	13.2	191.8	63.9	152.1	1.4
	<i>Center of tire</i>	146.3	11.9	181.9	60.6	146.3	1.4
	<i>Inner edge of tire</i>	132.2	19.3	190.1	63.4	132.2	1.6
	<i>Center between both tires</i>	68.1	19.9	127.6	42.5	68.1	2.9
Mid AC Layer 2*	Outer edge of tire*	152.1	13.2	191.8	63.9	152.1	1.4

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Boeing 777-200 Aircraft

Table 176. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 5 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	$p_{applied}$, psi	$q_{applied}$, psi	FOS
Surface	<i>Outer edge of tire</i>	38.0	54.4	201.1	67.0	38.0	5.6
	<i>Center of tire</i>	94.0	93.8	375.5	125.2	94.0	2.7
	<i>Inner edge of tire</i>	37.6	37.6	150.3	50.1	37.6	5.3
	<i>Center between both tires</i>	7.5	-2.5	0.0	0.0	7.5	22.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.1	37.8	180.5	60.2	67.1	3.1
	<i>Center of tire</i>	110.7	61.2	294.2	98.1	110.7	2.1
	<i>Inner edge of tire</i>	67.4	37.9	181.2	60.4	67.4	3.1
	<i>Center between both tires</i>	5.7	0.1	5.9	2.0	5.7	29.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.6	35.4	197.9	66.0	91.6	2.3
	<i>Center of tire</i>	92.6	36.0	200.6	66.9	92.6	2.3
	<i>Inner edge of tire</i>	91.9	35.5	198.6	66.2	91.9	2.3
	<i>Center between both tires</i>	4.1	0.3	4.9	1.6	4.1	40.7
Mid AC Layer 2	<i>Outer edge of tire</i>	136.3	10.9	168.9	56.3	136.3	1.5
	<i>Center of tire</i>	134.4	10.5	165.8	55.3	134.4	1.5
	<i>Inner edge of tire</i>	132.7	12.3	169.6	56.5	132.7	1.5
	<i>Center between both tires</i>	33.2	12.6	71.0	23.7	33.2	5.5
Mid AC Layer 2*	Outer edge of tire*	136.3	10.9	168.9	56.3	136.3	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 177. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 5 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.1	52.8	197.4	65.8	39.1	5.4
	<i>Center of tire</i>	94.8	93.0	373.9	124.6	94.8	2.6
	<i>Inner edge of tire</i>	39.0	39.0	156.1	52.0	39.0	5.2
	<i>Center between both tires</i>	5.2	-2.5	-2.3	-0.8	5.2	31.9
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.1	37.4	179.2	59.7	67.1	3.1
	<i>Center of tire</i>	109.4	62.2	295.9	98.6	109.4	2.1
	<i>Inner edge of tire</i>	67.9	39.0	185.0	61.7	67.9	3.1
	<i>Center between both tires</i>	3.9	0.0	3.7	1.2	3.9	43.3
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.1	34.7	195.0	65.0	91.1	2.3
	<i>Center of tire</i>	92.0	36.1	200.2	66.7	92.0	2.3
	<i>Inner edge of tire</i>	91.4	34.8	195.7	65.2	91.4	2.3
	<i>Center between both tires</i>	2.7	0.1	3.1	1.0	2.7	61.9
Mid AC Layer 2	<i>Outer edge of tire</i>	136.9	12.3	173.9	58.0	136.9	1.5
	<i>Center of tire</i>	133.9	9.6	162.7	54.2	133.9	1.5
	<i>Inner edge of tire</i>	133.5	13.7	174.6	58.2	133.5	1.5
	<i>Center between both tires</i>	33.5	12.7	71.6	23.9	33.5	5.4
Mid AC Layer 2*	Outer edge of tire*	136.9	12.3	173.9	58.0	136.9	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 178. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 5 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	40.0	52.1	196.2	65.4	40.0	5.3
	<i>Center of tire</i>	95.7	93.2	375.2	125.1	95.7	2.6
	<i>Inner edge of tire</i>	40.1	40.1	160.3	53.4	40.1	5.1
	<i>Center between both tires</i>	4.0	-2.4	-3.2	-1.1	4.0	41.8
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.5	38.4	182.6	60.9	67.5	3.1
	<i>Center of tire</i>	108.7	62.7	296.8	98.9	108.7	2.1
	<i>Inner edge of tire</i>	68.1	38.6	183.9	61.3	68.1	3.1
	<i>Center between both tires</i>	2.9	-0.1	2.6	0.9	2.9	57.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.8	34.1	193.1	64.4	90.8	2.3
	<i>Center of tire</i>	91.8	36.0	199.8	66.6	91.8	2.3
	<i>Inner edge of tire</i>	91.2	34.2	193.8	64.6	91.2	2.3
	<i>Center between both tires</i>	2.0	0.1	2.2	0.7	2.0	85.4
Mid AC Layer 2	<i>Outer edge of tire</i>	137.3	13.1	176.6	58.9	137.3	1.5
	<i>Center of tire</i>	134.4	10.6	166.2	55.4	134.4	1.5
	<i>Inner edge of tire</i>	133.2	13.1	172.6	57.5	133.2	1.5
	<i>Center between both tires</i>	33.7	12.7	71.8	23.9	33.7	5.4
Mid AC Layer 2*	Outer edge of tire*	137.3	13.1	176.6	58.9	137.3	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 179. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 15 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	36.2	55.4	202.4	67.5	36.2	5.9
	<i>Center of tire</i>	91.8	96.0	379.8	126.6	91.8	2.7
	<i>Inner edge of tire</i>	35.3	35.3	141.3	47.1	35.3	5.6
	<i>Center between both tires</i>	10.8	-2.5	3.4	1.1	10.8	15.5
1.5 inches Below Surface	<i>Outer edge of tire</i>	66.6	36.3	175.4	58.5	66.6	3.1
	<i>Center of tire</i>	111.8	60.4	293.0	97.7	111.8	2.1
	<i>Inner edge of tire</i>	67.4	38.9	184.2	61.4	67.4	3.1
	<i>Center between both tires</i>	8.3	0.2	8.8	2.9	8.3	20.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.1	30.4	182.3	60.8	91.1	2.3
	<i>Center of tire</i>	93.8	33.3	193.7	64.6	93.8	2.2
	<i>Inner edge of tire</i>	91.6	32.4	188.9	63.0	91.6	2.3
	<i>Center between both tires</i>	6.1	0.4	7.3	2.4	6.1	27.6
Mid AC Layer 2	<i>Outer edge of tire</i>	136.0	10.2	166.5	55.5	136.0	1.5
	<i>Center of tire</i>	133.3	8.4	158.5	52.8	133.3	1.5
	<i>Inner edge of tire</i>	131.6	10.5	163.1	54.4	131.6	1.5
	<i>Center between both tires</i>	32.8	12.5	70.3	23.4	32.8	5.6
Mid AC Layer 2*	Outer edge of tire*	136.0	10.2	166.5	55.5	136.0	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 180. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 15 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.4	53.9	200.0	66.7	38.4	5.5
	<i>Center of tire</i>	94.4	93.4	374.7	124.9	94.4	2.7
	<i>Inner edge of tire</i>	38.1	38.1	152.3	50.8	38.1	5.3
	<i>Center between both tires</i>	6.9	-2.5	-0.5	-0.2	6.9	24.2
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.1	37.6	179.9	60.0	67.1	3.1
	<i>Center of tire</i>	110.4	61.4	294.5	98.2	110.4	2.1
	<i>Inner edge of tire</i>	67.5	37.7	180.6	60.2	67.5	3.1
	<i>Center between both tires</i>	5.2	0.1	5.4	1.8	5.2	32.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.5	35.3	197.5	65.8	91.5	2.3
	<i>Center of tire</i>	92.4	36.0	200.5	66.8	92.4	2.3
	<i>Inner edge of tire</i>	91.8	35.3	197.7	65.9	91.8	2.3
	<i>Center between both tires</i>	3.7	0.2	4.5	1.5	3.7	45.0
Mid AC Layer 2	<i>Outer edge of tire</i>	136.5	11.3	170.4	56.8	136.5	1.5
	<i>Center of tire</i>	133.4	8.4	158.4	52.8	133.4	1.5
	<i>Inner edge of tire</i>	132.9	12.7	171.1	57.0	132.9	1.5
	<i>Center between both tires</i>	33.3	12.7	71.4	23.8	33.3	5.5
Mid AC Layer 2*	Outer edge of tire*	136.5	11.3	170.4	56.8	136.5	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 181. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 15 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	39.3	52.5	196.9	65.6	39.3	5.4
	<i>Center of tire</i>	95.4	94.4	378.7	126.2	95.4	2.6
	<i>Inner edge of tire</i>	39.3	39.3	157.2	52.4	39.3	5.1
	<i>Center between both tires</i>	4.9	-2.5	-2.6	-0.9	4.9	33.8
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.1	37.3	178.9	59.6	67.1	3.1
	<i>Center of tire</i>	109.3	62.3	296.1	98.7	109.3	2.1
	<i>Inner edge of tire</i>	67.9	39.0	184.9	61.6	67.9	3.1
	<i>Center between both tires</i>	3.6	-0.1	3.5	1.2	3.6	45.9
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.0	34.5	194.6	64.9	91.0	2.3
	<i>Center of tire</i>	92.0	36.0	200.0	66.7	92.0	2.3
	<i>Inner edge of tire</i>	91.4	34.6	195.3	65.1	91.4	2.3
	<i>Center between both tires</i>	2.5	0.1	2.9	1.0	2.5	66.2
Mid AC Layer 2	<i>Outer edge of tire</i>	137.1	12.5	174.6	58.2	137.1	1.5
	<i>Center of tire</i>	134.1	9.8	163.6	54.5	134.1	1.5
	<i>Inner edge of tire</i>	132.9	12.5	170.6	56.9	132.9	1.5
	<i>Center between both tires</i>	33.6	12.7	71.7	23.9	33.6	5.4
Mid AC Layer 2*	Outer edge of tire*	137.1	12.5	174.6	58.2	137.1	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 182. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 45 mph and 52 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	28.5	-16.8	-21.7	-7.2	28.5	5.7
	<i>Center of tire</i>	85.8	101.5	390.4	130.1	85.8	3.0
	<i>Inner edge of tire</i>	28.7	28.7	114.9	38.3	28.7	6.7
	<i>Center between both tires</i>	16.7	-2.3	9.8	3.3	16.7	10.1
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.2	38.5	182.6	60.9	67.2	3.1
	<i>Center of tire</i>	111.9	61.0	294.9	98.3	111.9	2.1
	<i>Inner edge of tire</i>	66.9	38.8	183.3	61.1	66.9	3.1
	<i>Center between both tires</i>	12.8	0.4	14.1	4.7	12.8	13.2
Bottom AC Layer 1	<i>Outer edge of tire</i>	92.8	28.5	178.3	59.4	92.8	2.2
	<i>Center of tire</i>	99.0	32.9	197.7	65.9	99.0	2.1
	<i>Inner edge of tire</i>	93.5	31.6	188.2	62.7	93.5	2.2
	<i>Center between both tires</i>	9.4	0.7	11.4	3.8	9.4	17.9
Mid AC Layer 2	<i>Outer edge of tire</i>	134.7	7.4	156.9	52.3	134.7	1.5
	<i>Center of tire</i>	131.9	5.6	148.6	49.5	131.9	1.5
	<i>Inner edge of tire</i>	130.0	7.9	153.8	51.3	130.0	1.5
	<i>Center between both tires</i>	32.8	12.4	70.1	23.4	32.8	5.6
Mid AC Layer 2*	Outer edge of tire*	134.7	7.4	156.9	52.3	134.7	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Table 183. 3D-Move Responses for TEB Pavement Under Boeing 777-200 at 45 mph and 58 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	37.0	55.7	204.1	68.0	37.0	5.7
	<i>Center of tire</i>	92.9	94.9	377.6	125.9	92.9	2.7
	<i>Inner edge of tire</i>	36.3	36.3	145.2	48.4	36.3	5.5
	<i>Center between both tires</i>	9.8	-2.4	2.5	0.8	9.8	17.0
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.2	38.4	182.3	60.8	67.2	3.1
	<i>Center of tire</i>	111.8	60.4	293.1	97.7	111.8	2.1
	<i>Inner edge of tire</i>	67.4	38.5	183.0	61.0	67.4	3.1
	<i>Center between both tires</i>	7.5	0.2	8.1	2.7	7.5	22.5
Bottom AC Layer 1	<i>Outer edge of tire</i>	90.6	30.3	181.4	60.5	90.6	2.3
	<i>Center of tire</i>	93.6	35.7	200.7	66.9	93.6	2.3
	<i>Inner edge of tire</i>	92.6	36.3	201.3	67.1	92.6	2.3
	<i>Center between both tires</i>	5.5	0.4	6.8	2.3	5.5	30.5
Mid AC Layer 2	<i>Outer edge of tire</i>	136.0	9.9	165.8	55.3	136.0	1.5
	<i>Center of tire</i>	134.2	9.2	161.8	53.9	134.2	1.5
	<i>Inner edge of tire</i>	132.2	11.4	166.5	55.5	132.2	1.5
	<i>Center between both tires</i>	33.7	12.7	72.0	24.0	33.7	5.4
Mid AC Layer 2*	Outer edge of tire*	136.0	9.9	165.8	55.3	136.0	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

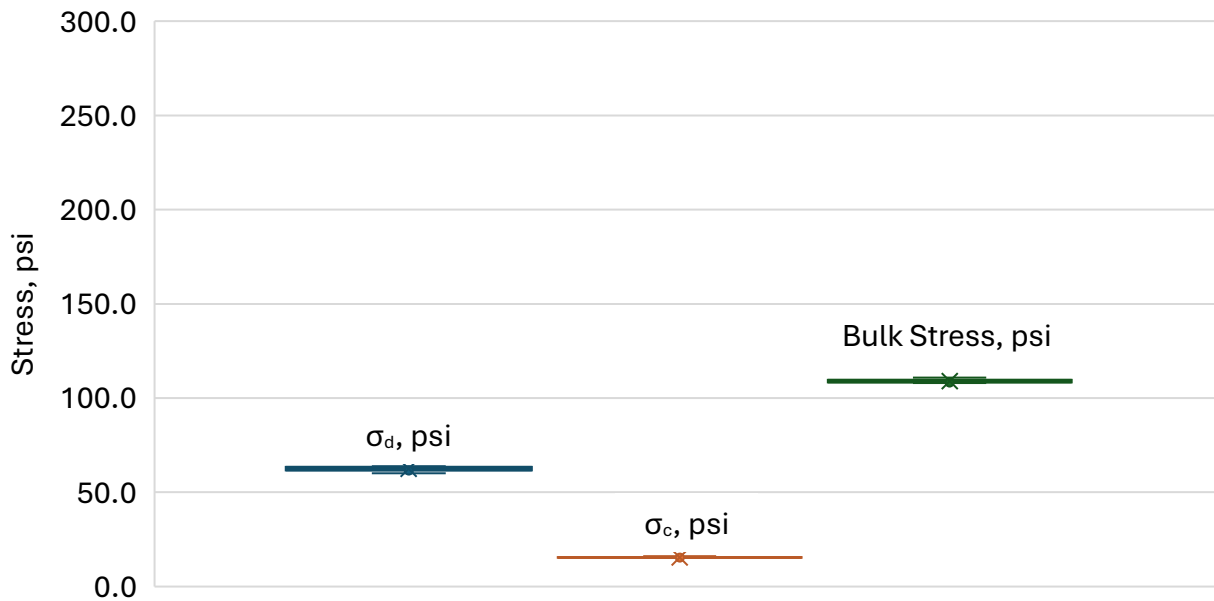
Table 184. 3D-Move Responses for TEB Pavement Under Boeing Aircraft B777-200 at 45 mph and 64 °C

Depth	Location	σ_d , psi	σ_c , psi	Bulk Stress, psi	p_{applied} , psi	q_{applied} , psi	FOS
Surface	<i>Outer edge of tire</i>	38.6	53.6	199.3	66.4	38.6	5.5
	<i>Center of tire</i>	94.7	93.2	374.1	124.7	94.7	2.6
	<i>Inner edge of tire</i>	38.4	38.4	153.4	51.1	38.4	5.2
	<i>Center between both tires</i>	6.5	-2.5	-0.9	-0.3	6.5	25.6
1.5 inches Below Surface	<i>Outer edge of tire</i>	67.1	37.5	179.7	59.9	67.1	3.1
	<i>Center of tire</i>	110.4	61.6	295.1	98.4	110.4	2.1
	<i>Inner edge of tire</i>	67.5	37.7	180.4	60.1	67.5	3.1
	<i>Center between both tires</i>	4.9	0.0	5.0	1.7	4.9	34.4
Bottom AC Layer 1	<i>Outer edge of tire</i>	91.4	35.2	197.0	65.7	91.4	2.3
	<i>Center of tire</i>	92.3	35.9	200.1	66.7	92.3	2.3
	<i>Inner edge of tire</i>	91.7	35.2	197.3	65.8	91.7	2.3
	<i>Center between both tires</i>	3.5	0.3	4.3	1.4	3.5	48.0
Mid AC Layer 2	<i>Outer edge of tire</i>	136.9	11.9	172.6	57.5	136.9	1.5
	<i>Center of tire</i>	134.2	8.8	160.6	53.5	134.2	1.5
	<i>Inner edge of tire</i>	132.7	11.9	168.5	56.2	132.7	1.5
	<i>Center between both tires</i>	34.2	12.9	72.8	24.3	34.2	5.3
Mid AC Layer 2*	Outer edge of tire*	136.9	11.9	172.6	57.5	136.9	1.5

*Indicates the critical condition between all the evaluated response points with the minimum FOS for rutting.

Chapter 4. Critical State of Stresses for Repeated Load Triaxial Test

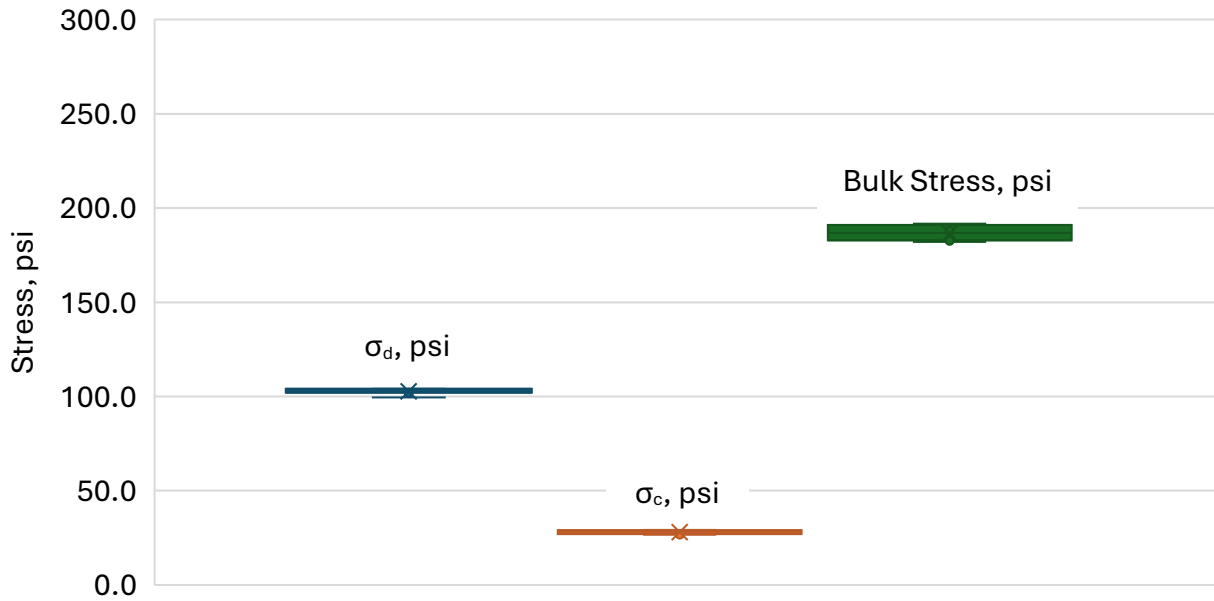
Gross Aircraft Weight (GAW) $\leq$ 12,500 lb – Beechcraft King Air B200



Source: University of Nevada, Reno

Figure 5. Summary Critical State of Stresses from 3D-Move Analyses for the Four Modeled Airfields Under GAW $\leq$ 12,500 lb

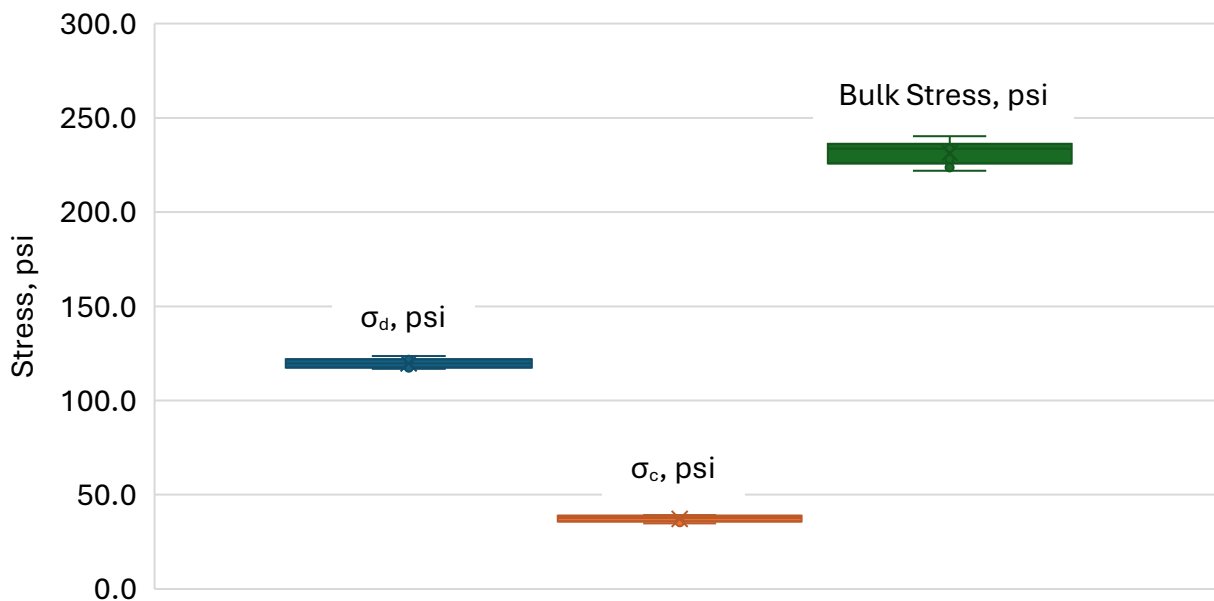
GAW ≤ 60,000 lb – Bombardier CRJ 200



Source: University of Nevada, Reno

Figure 6. Summary Critical State of Stresses from 3D-Move Analyses for the Four Modeled Airfields Under GAW ≤ 60,000 lb

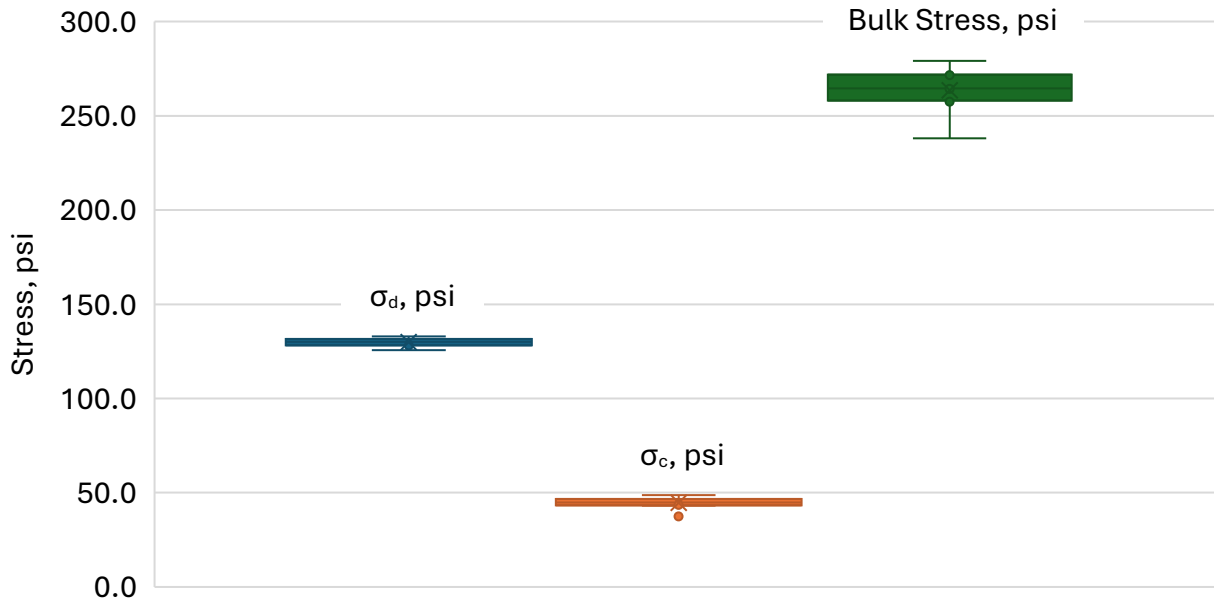
GAW ≤ 100,000 lb – Gulfstream G600



Source: University of Nevada, Reno

Figure 7. Summary Critical State of Stresses from 3D-Move Analyses for the Four Modeled Airfields Under GAW ≤ 100,000 lb

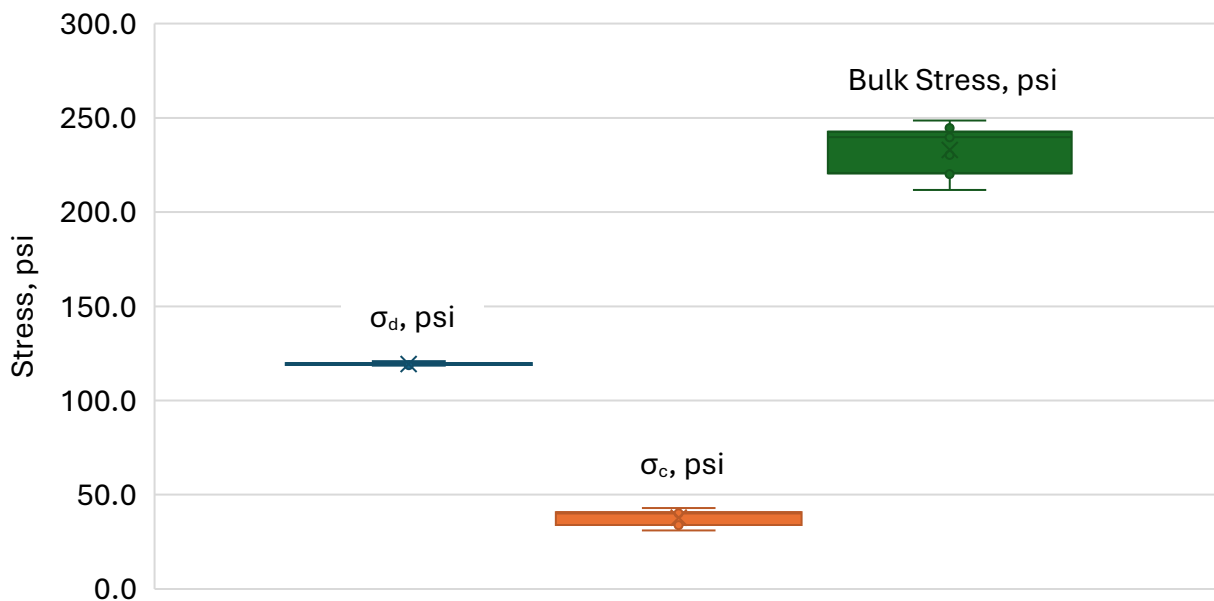
GAW > 100,000 lb – Boeing 737 MAX 8



Source: University of Nevada, Reno

Figure 8. Summary Critical State of Stresses from 3D-Move Analyses for the Four Modeled Airfields Under GAW > 100,000 lb

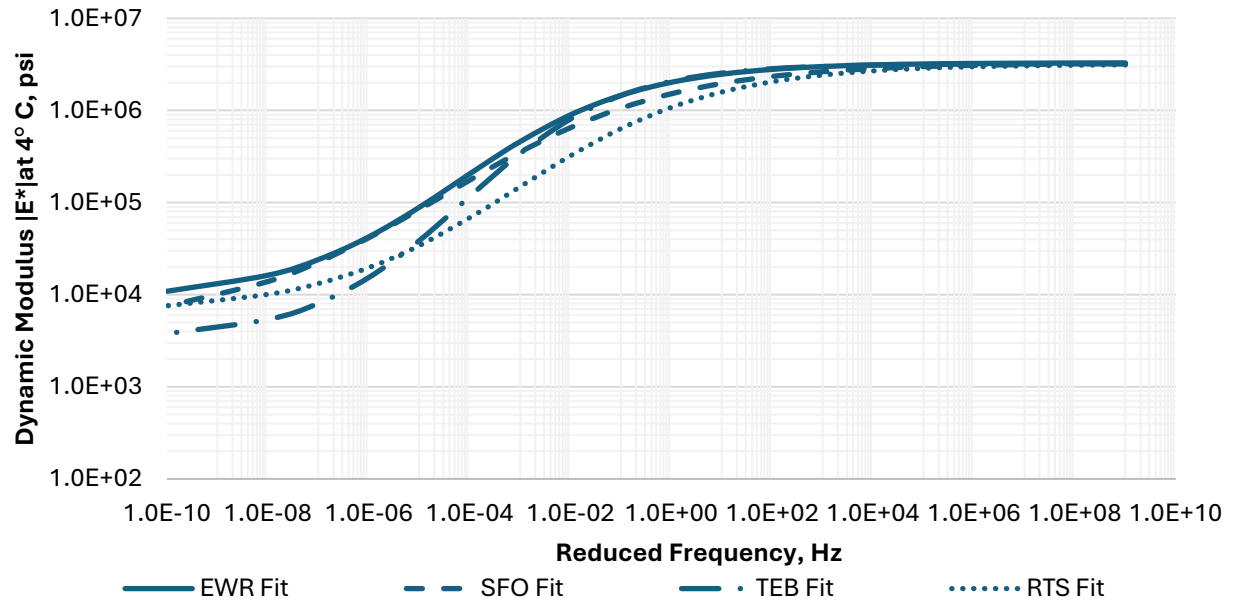
GAW > 100,000 lb – Boeing B777-200



Source: University of Nevada, Reno

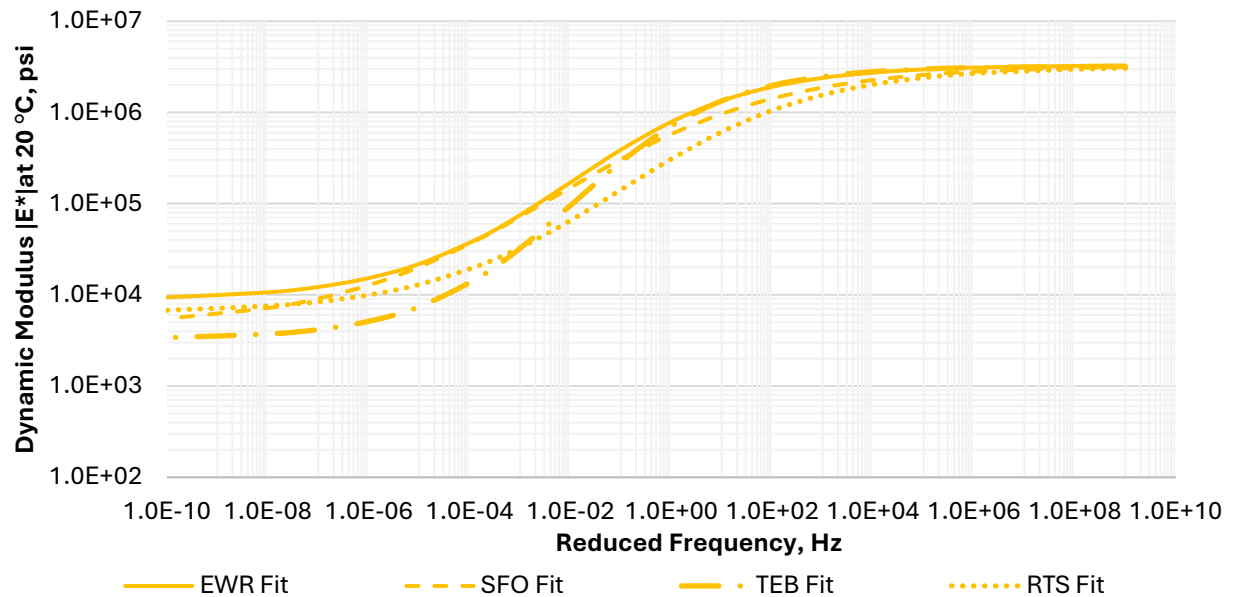
Figure 9. Summary Critical State of Stresses from 3D-Move Analyses for the Four Modeled Airfields Under GAW > 100,000 lb

Chapter 5. Dynamic Modulus $|E^*|$ Test Results



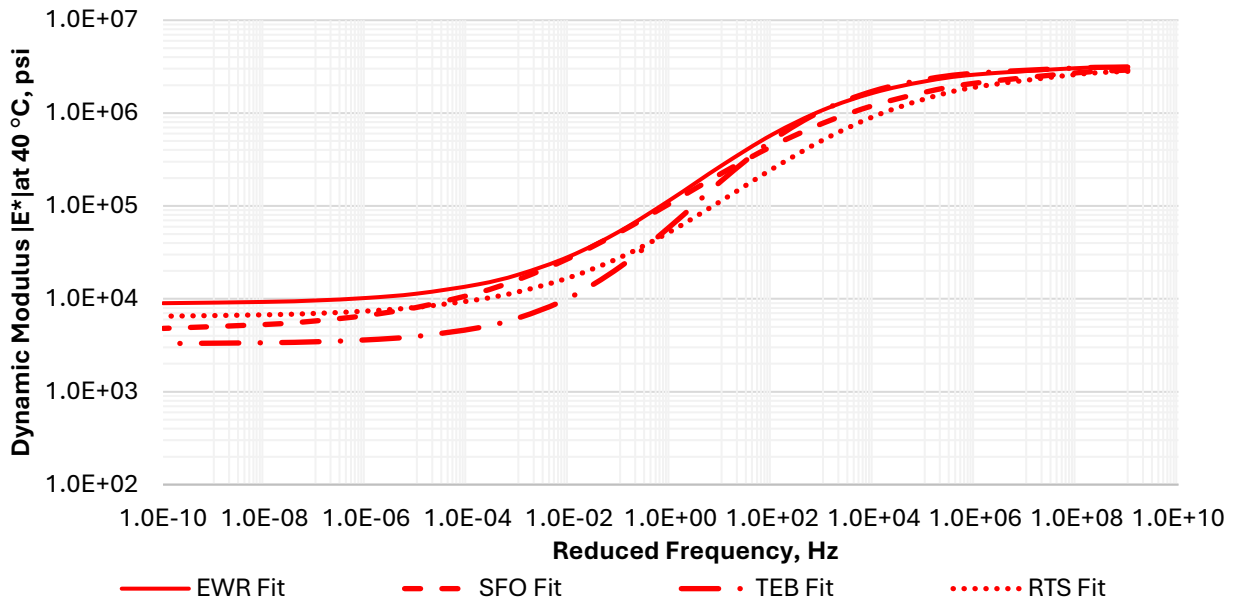
Source: University of Nevada, Reno

Figure 10. Dynamic Modulus Master Curves Fit at 4° C Reference Temperature



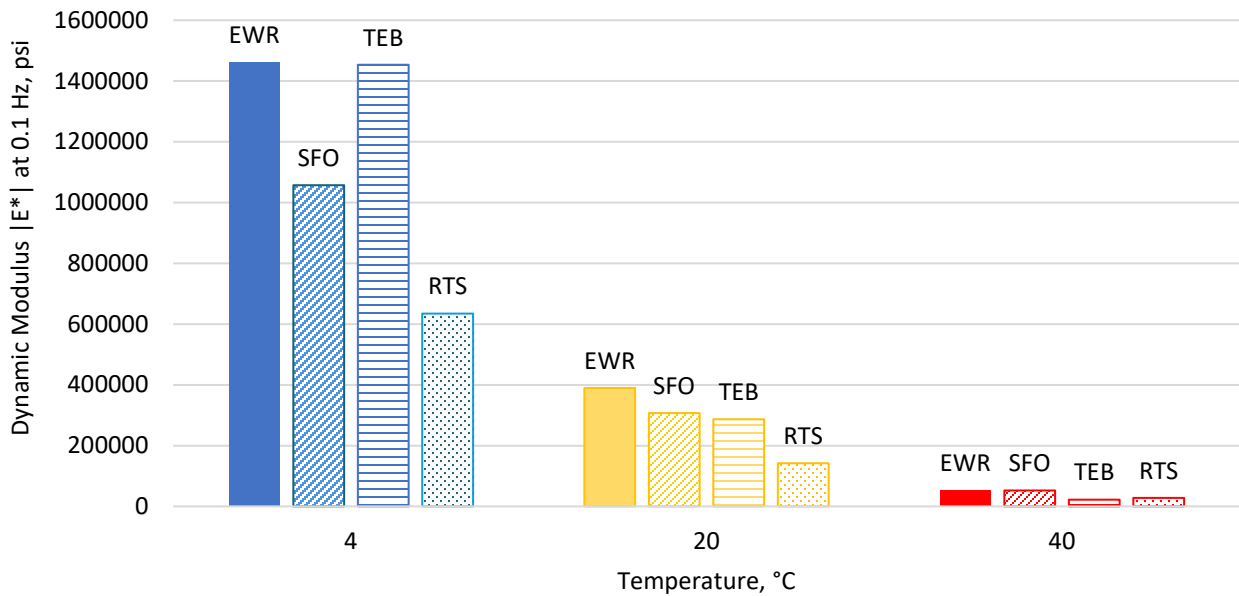
Source: University of Nevada, Reno

Figure 11. Dynamic Modulus Master Curves Fit at 20 °C Reference Temperature



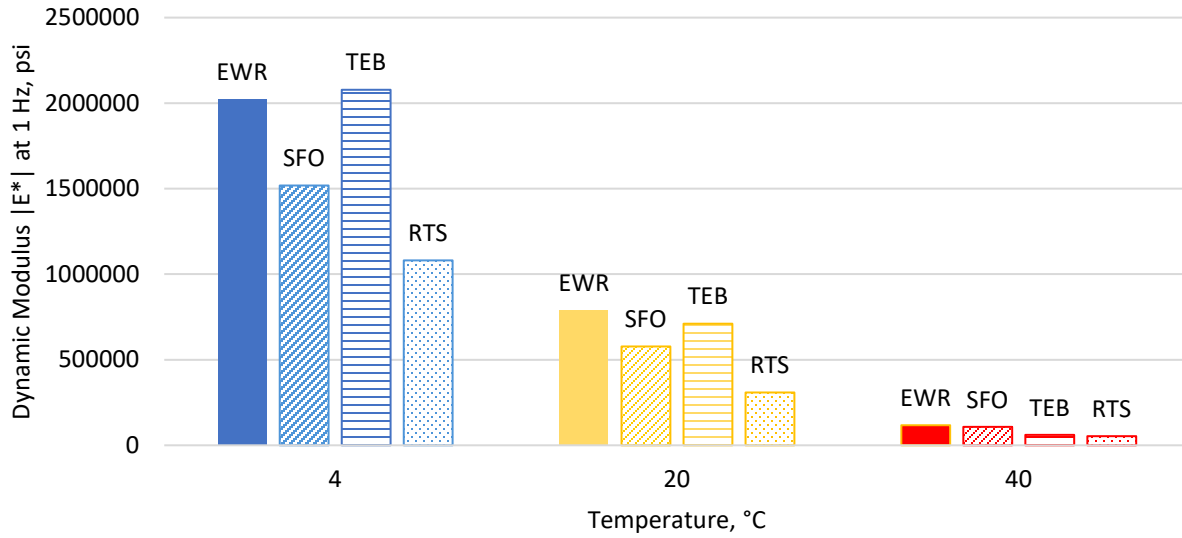
Source: University of Nevada, Reno

Figure 12. Dynamic Modulus Master Curves Fit at 40 °C Reference Temperature



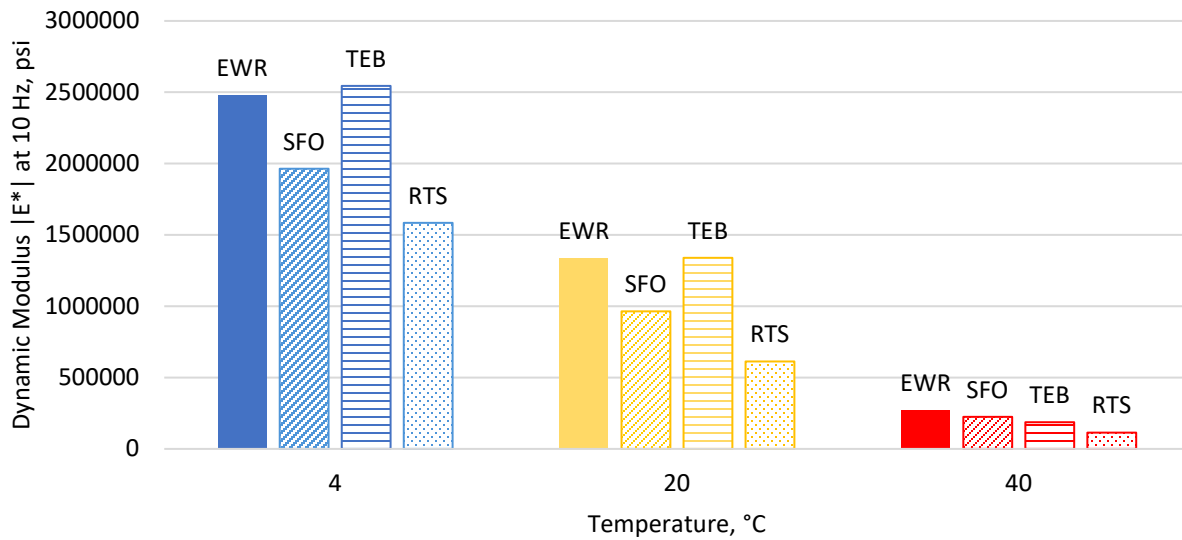
Source: University of Nevada, Reno

Figure 13. Dynamic Modulus Fit Values at 0.1 Hz Frequency



Source: University of Nevada, Reno

Figure 14. Dynamic Modulus Fit Values at 1 Hz Frequency

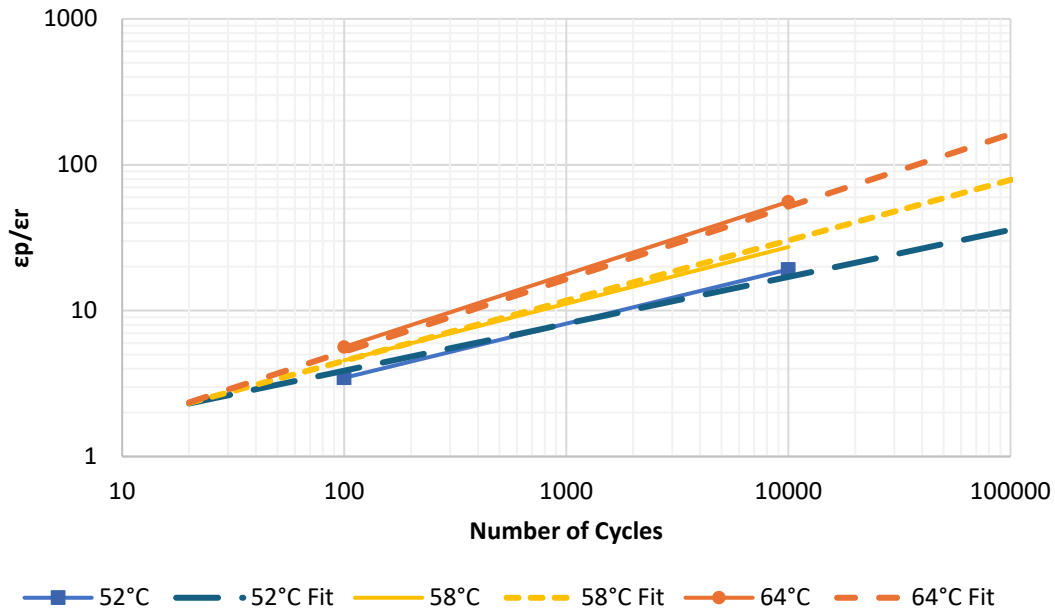


Source: University of Nevada, Reno

Figure 15. Dynamic Modulus Fit Values at 10 Hz Frequency

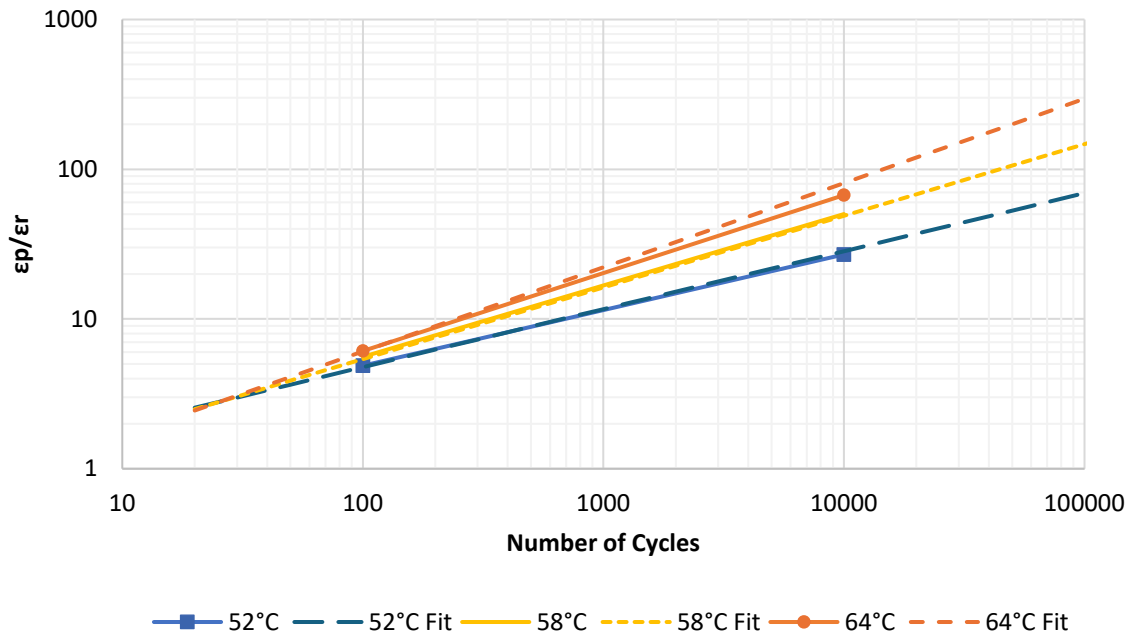
Chapter 6. Repeated Load Triaxial Test Results

Newark Liberty International Airport (EWR)



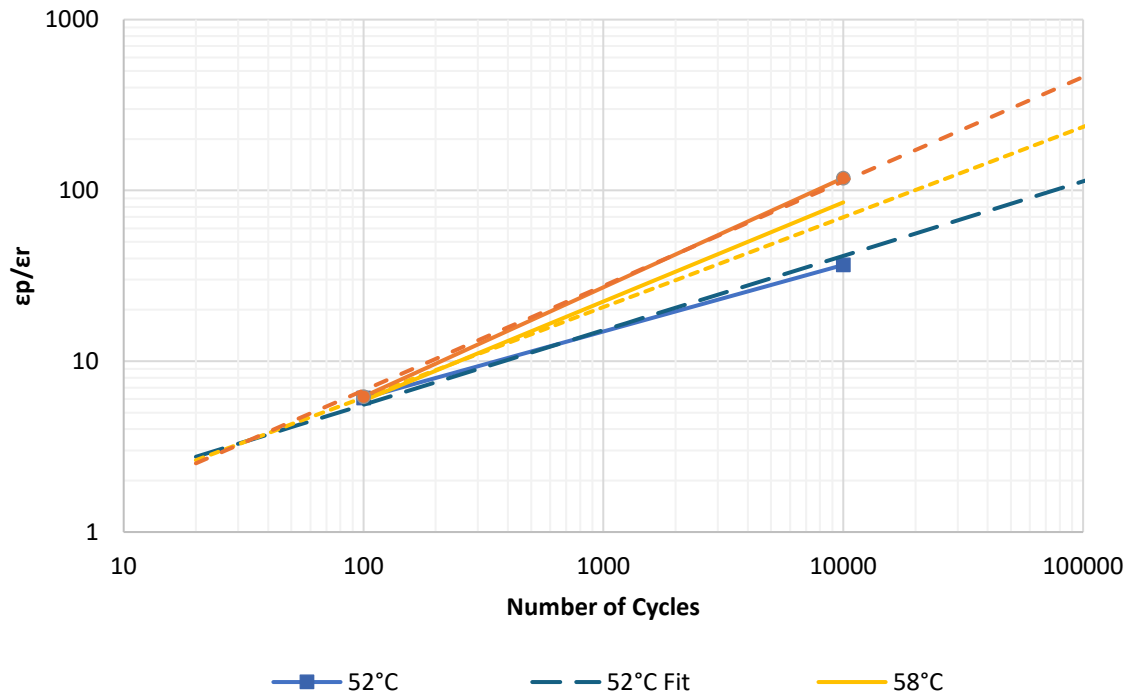
Source: University of Nevada, Reno

Figure 16. Rutting Performance Model for EWR Airfield Pavement Under 65 psi Deviatoric Stress



Source: University of Nevada, Reno

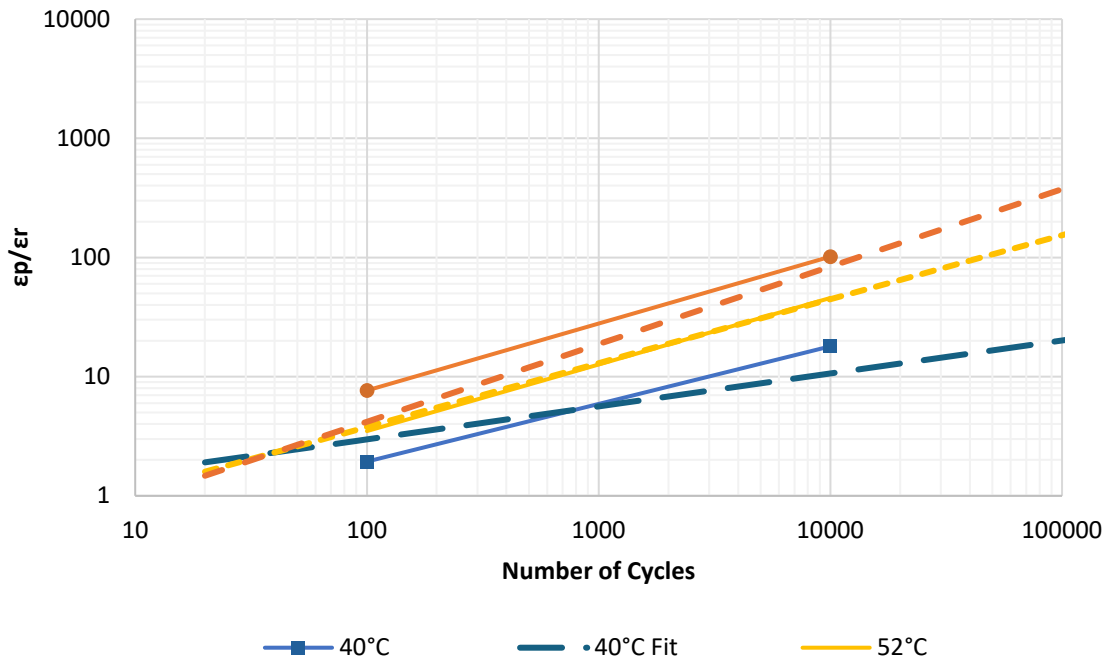
Figure 17. Rutting Performance Model for EWR Airfield Pavement Under 105 psi Deviatoric Stress



Source: University of Nevada, Reno

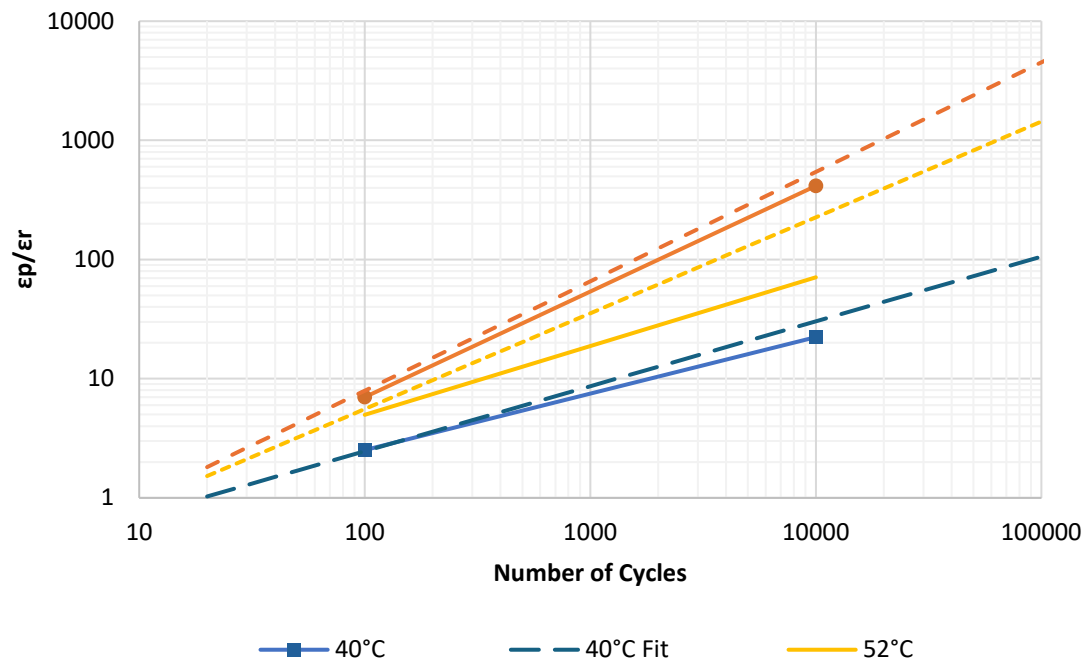
Figure 18. Rutting Performance Model for EWR Airfield Pavement Under 150 psi Deviatoric Stress

Reno Stead Airport (RTS)



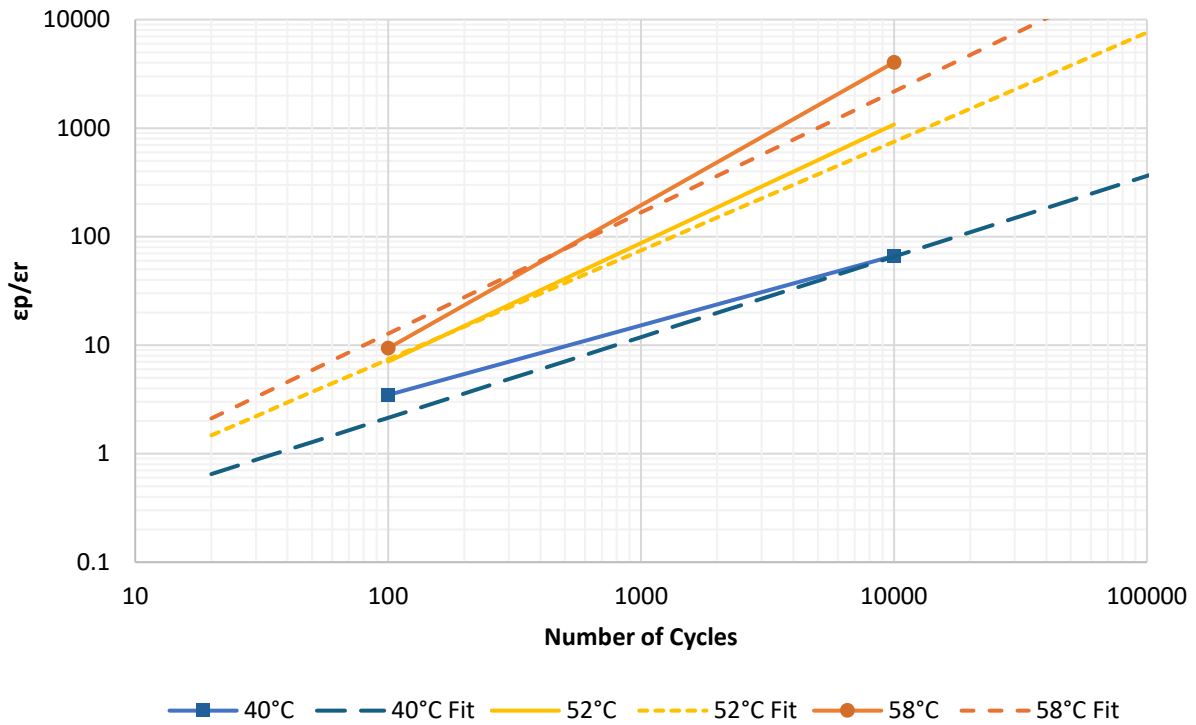
Source: University of Nevada, Reno

Figure 19. Rutting Performance Model for RTS Airfield Pavement Under 65 psi Deviatoric Stress



Source: University of Nevada, Reno

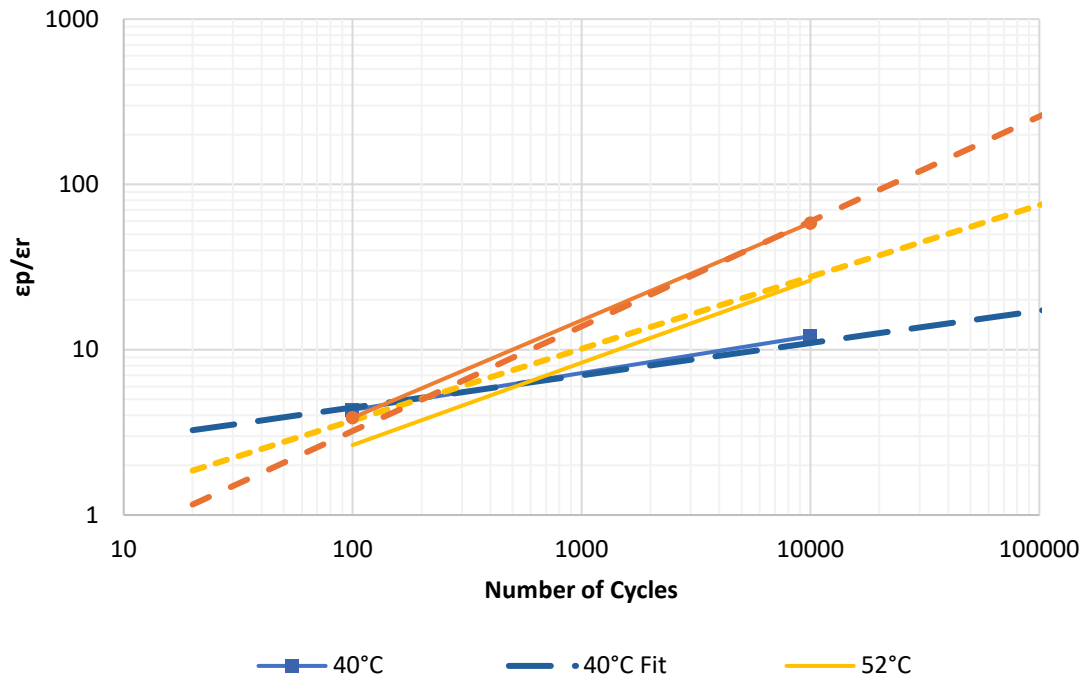
Figure 20. Rutting Performance Model for RTS Airfield Pavement Under 105 psi Deviatoric Stress



Source: University of Nevada, Reno

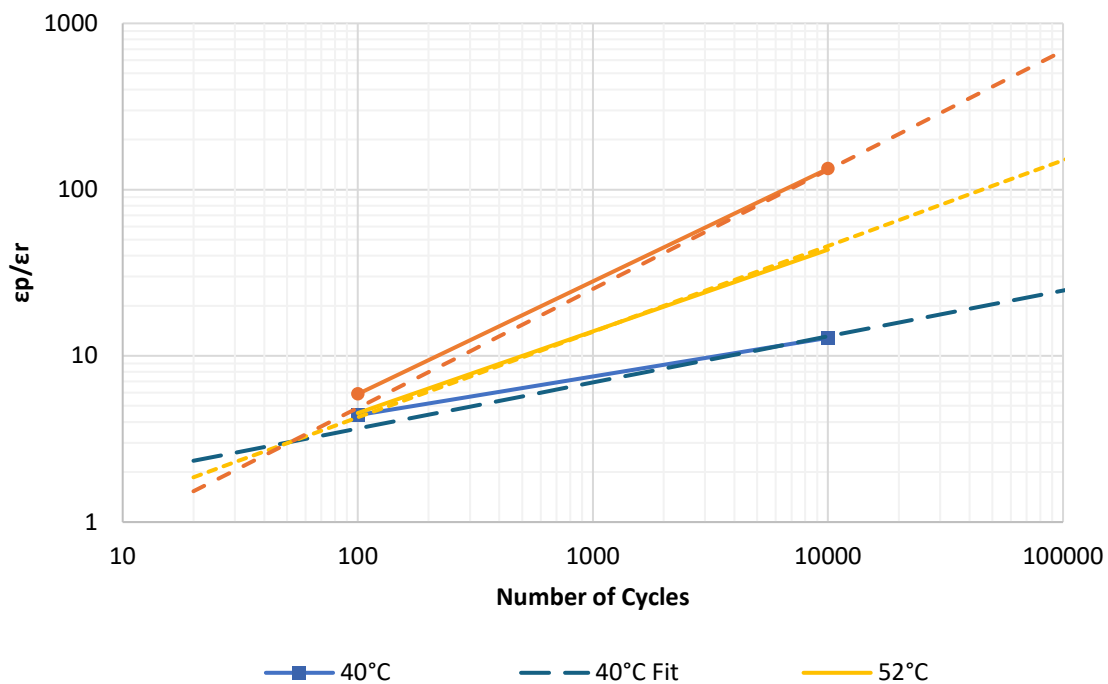
Figure 21. Rutting Performance Model for RTS Airfield Pavement Under 150 psi Deviatoric Stress

San Francisco International Airport (SFO)



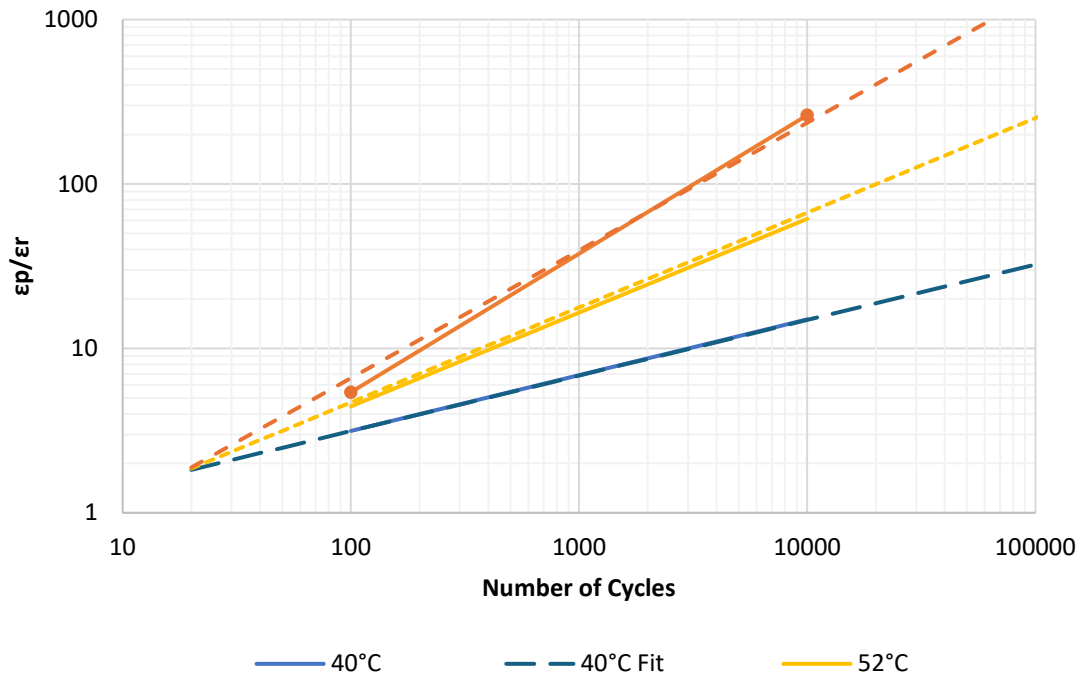
Source: University of Nevada, Reno

Figure 22. Rutting Performance Model for SFO Airfield Pavement Under 65 psi Deviatoric Stress



Source: University of Nevada, Reno

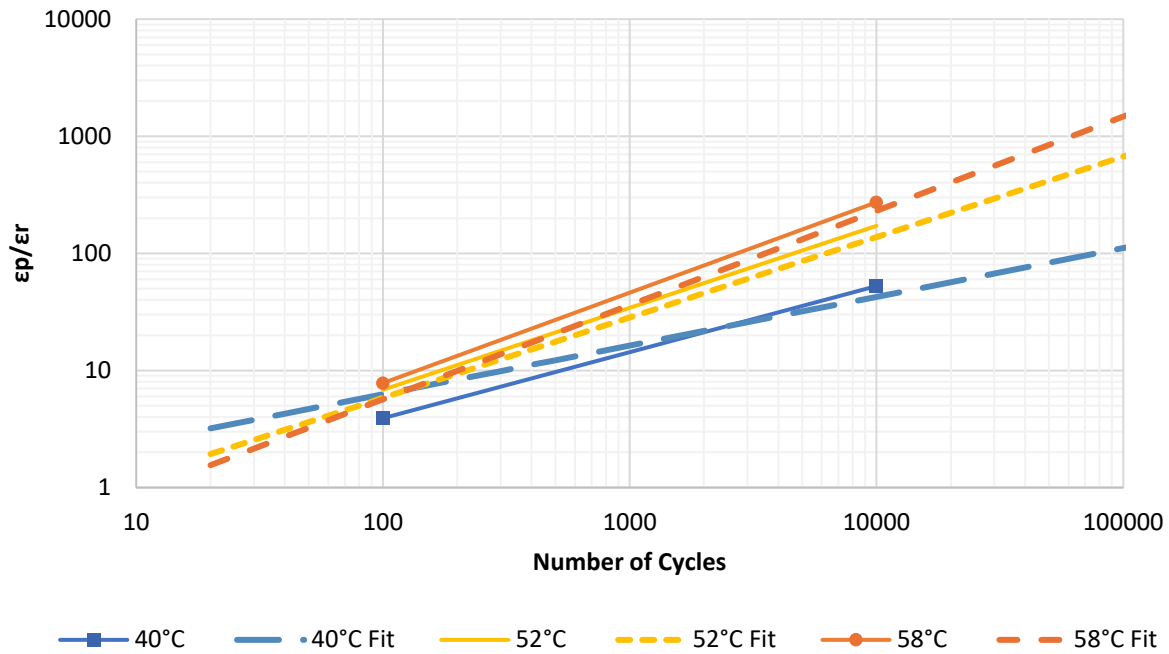
Figure 23. Rutting Performance Model for SFO Airfield Pavement Under 105 psi Deviatoric Stress



Source: University of Nevada, Reno

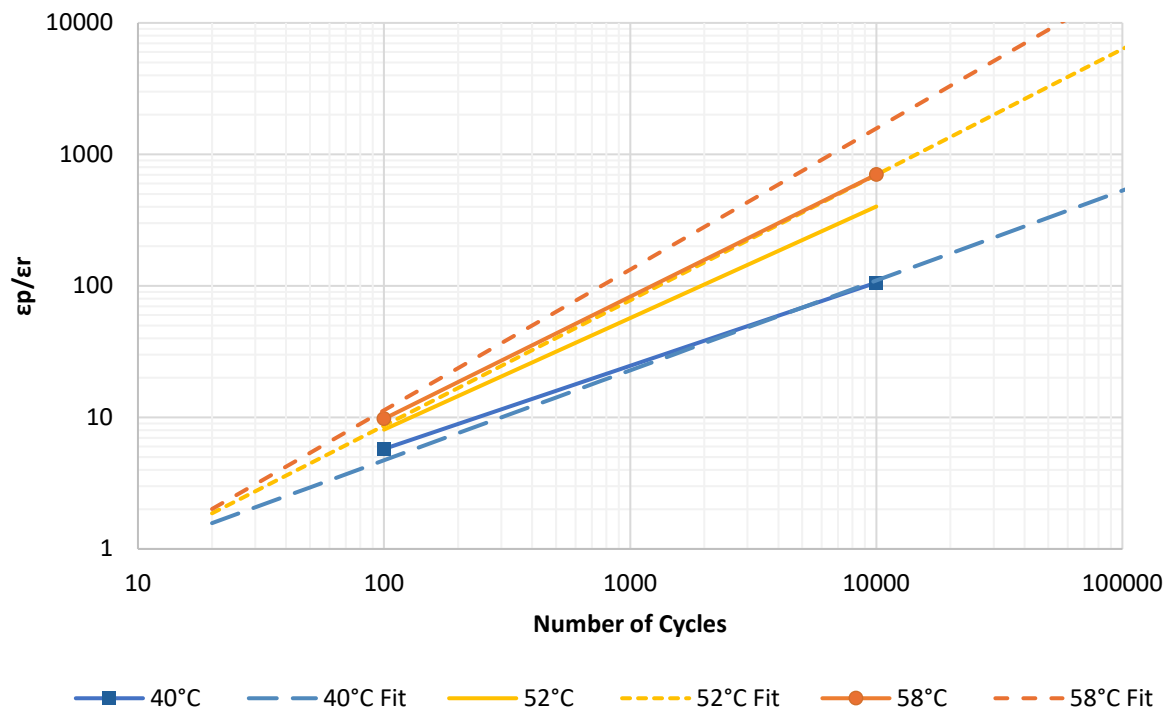
Figure 24. Rutting Performance Model for SFO Airfield Pavement Under 150 psi Deviatoric Stress

Teterboro Airport (TEB)



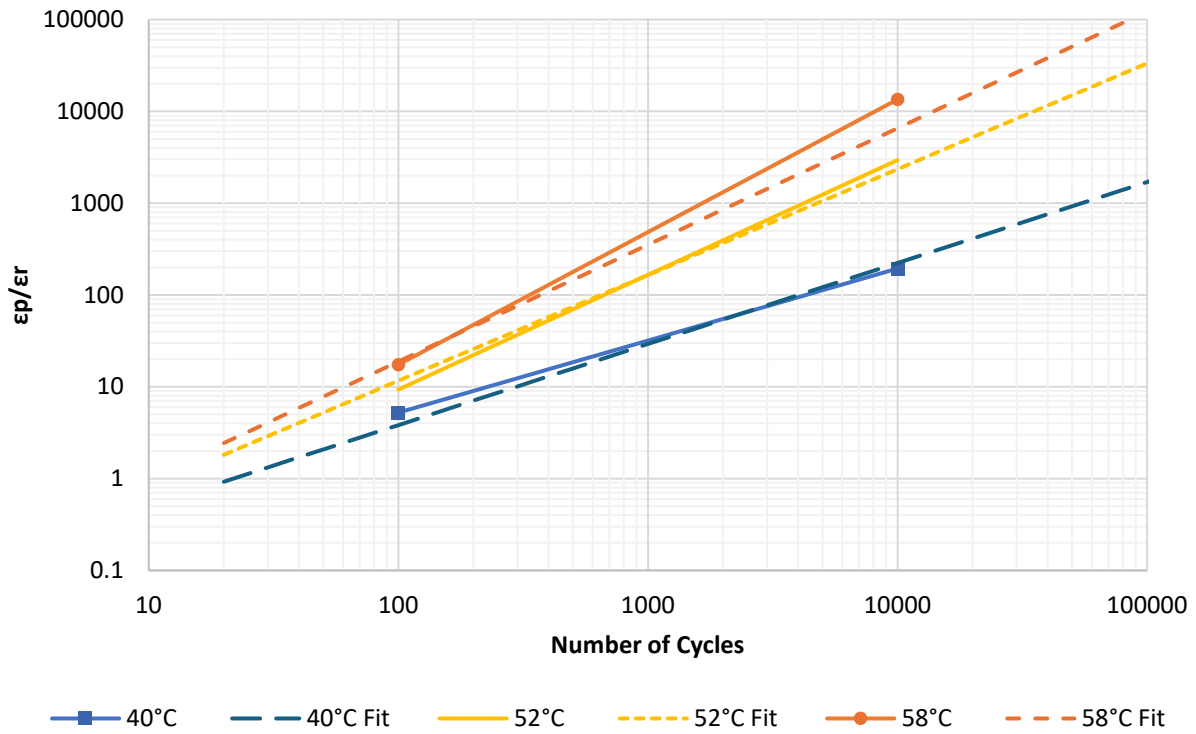
Source: University of Nevada, Reno

Figure 25. Rutting Performance Model for TEB Airfield Pavement Under 65 psi Deviatoric Stress



Source: University of Nevada, Reno

Figure 26. Rutting Performance Model for TEB Airfield Pavement Under 105 psi Deviatoric Stress



Source: University of Nevada, Reno

Figure 27. Rutting Performance Model for TEB Airfield Pavement Under 150 psi Deviatoric Stress

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