

7. PAVEMENT AND BRIDGE PERFORMANCE MEASURES

**BACKGROUND**

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The federal laws Fixing America’s Surface Transportation Act and the Infrastructure Investment and Jobs Act require a performance-based process to monitor the conditions of pavements and bridges of the National Highway System, set performance targets, and report on progress. H-GAC is responsible for setting pavement and bridge targets for the 8-county region. Measuring and tracking the performance of the region’s transportation system is an approach to evaluate the effectiveness of transportation investments, track progress toward achieving goals, and maintain a State of Good Repair for pavements and bridges.

**CURRENT SITUATION**

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The federal performance period, spanning from 2022 to 2025, is currently underway. Staff has conducted data analysis on pavement conditions, evaluating ride quality, and bridge conditions, considering the assessment scores provided by the National Bridge Inventory. To ensure a comprehensive evaluation, staff has been collaborating with the Texas Department of Transportation (TxDOT) and local governments for the data review and analysis.

As part of our progress monitoring efforts, staff is reporting on target achievement of the 2022 pavement and bridge targets. The six pavement targets for 2022 were achieved. The bridge targets for 2022 were narrowly missed by less than 1%. There are no penalties when targets are not met. Moreover, for the past several months, staff has been in discussions, receiving input, and recommendations from committees for past performance, and establishing future targets for the years of 2024 and 2026. Historical conditions over a five-year period have been steady. Target setting methodology consists of averaging historical ratings and holding them flat for future years. Table 1 of Resolution 2023-27 contains the pavement and bridge performance measures, reporting of past performance, and future targets for 2024 and 2026. The Transportation Improvement Program and Regional Transportation Plan subcommittees, and the Transportation Advisory Committee have recommended these performance targets be brought to the TPC for approval. Target setting and reporting is due to TxDOT and the Federal Highway Administration by August 9, 2023.

**ACTION REQUESTED**

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Approval of TPC Resolution 2023-27



# Resolution

## NO. 2023-27

AUTHORIZING ADOPTION OF FEDERAL PERFORMANCE TARGETS FOR PAVEMENT AND BRIDGE PERFORMANCE MEASURES REQUIRED BY THE FAST ACT AND THE INFRASTRUCTURE INVESTMENT AND JOBS ACT

WHEREAS, the Houston-Galveston Area Council (H-GAC) is designated as the Metropolitan Planning Organization (MPO) for the Houston - Galveston Transportation Management Area by the Governor of Texas in accordance with federal law, and;

WHEREAS, the Transportation Policy Council (TPC) is the regional transportation policy body, and;

WHEREAS, the H-GAC is committed to maintaining and improving a State of Good Repair for the region's pavements and bridges;

WHEREAS, ensuring the preservation of pavements and bridges is critical to the movement of goods and people, and economic development, and;

WHEREAS, federal law assigns the MPO the responsibility for carrying out the metropolitan planning process, in cooperation with the State and publicly-owned transit service providers, and;

WHEREAS, the federal law assigns the MPO the responsibility for developing and approving regional performance targets and to incorporate these measures and a performance-based planning process into the Transportation Improvement Program (TIP) and the Regional Transportation Plan (RTP) documents, and;

WHEREAS, the federal law requires the adoption of regional pavement and bridge performance targets for the Interstate and Non-Interstate National Highway System, for the percentage of the highways and bridges in good and poor condition based on the federal criteria measuring the International Roughness Index, cracking, and rutting or faulting of highways and the evaluation of the bridge deck area, superstructure, substructure and culvert; as shown in the attached table, and;

NOW, THEREFORE, BE IT RESOLVED THAT THE TRANSPORTATION POLICY COUNCIL FOR THE HOUSTON-GALVESTON TRANSPORTATION MANAGEMENT AREA ADOPTS THE REGIONAL PAVEMENT AND BRIDGE TARGETS AS IDENTIFIED IN THE ATTACHED TABLE 1 AND AMENDS THE PERFORMANCE MEASURES INTO THE 2023-2026 TRANSPORTATION IMPROVEMENT PROGRAM AND THE 2045 REGIONAL TRANSPORTATION PLAN UPDATE.

PASSED AND APPROVED this 28th day of July 2023, at a regularly called meeting of the  
Transportation Policy Council.

APPROVED:

David W. Robinson 08/04/2023  
David W. Robinson (Aug 4, 2023 13:03 CDT)

Hon. David Robinson, Chairman  
Transportation Policy Council

ATTEST:

Nancy Arnold 08/06/2023

Hon. Nancy Arnold, Secretary  
Transportation Policy Council

**Table 1. Pavement and Bridge Past Performance and Future Targets**

<b>PAVEMENT AND BRIDGE</b>					
<b>Performance Measure</b>	<b>2022 Targets / Actuals</b>	<b>2022 Targets achieved</b>	<b>Desired Trend</b>	<b>2024 Targets</b>	<b>2026 Targets</b>
Interstate pavement in good condition	42.1% / 44.6%	Yes	↑	45.7%	45.7%
Interstate pavement in fair condition	57.8% / 55.3%	Yes	↓	54.2%	54.2%
Interstate pavement in poor condition	0.1% / 0.1%	Yes	↓	0.1%	0.1%
Non-Interstate NHS pavement in good condition	34.4% / 38.3%	Yes	↑	34.7%	34.7%
Non-Interstate NHS pavement in fair condition	40.8% / 40.2%	Yes	↓	62.0%	62.0%
Non-Interstate NHS pavement in poor condition	24.8% / 21.5%	Yes	↓	3.2%	3.2%
National Highway System bridge deck area in good condition	49.1% / 48.5%	No	↑	49.9%	49.9%
National Highway System bridge deck area in fair condition	49.7% / 50.2%	No	↓	48.8%	48.8%
National Highway System bridge deck area in poor condition	1.2% / 1.3%	No	↓	1.3%	1.3%

*For Non-Interstate National Highway System (NHS) pavement measures, the 2022 the condition calculation was based on only one condition rating, the International Roughness Index (IRI). For 2024 and 2026, the condition calculation was changed to three ratings, the IRI, Cracking, and Rutting or Faulting (based on the pavement types of asphalt concrete, jointed concrete, and continuously reinforced concrete pavement). This explains the noticeable difference between the Non-Interstate pavement targets in Fair condition in 2022 of 40.8% and in 2024 of 62.0%.*