

Costs for Lucas and Wood County Bridges that are NOT ON State System

Total deck area: 1,601,575 square feet

TO MAINTAIN STEADY STATE:

General Appraisal (GA):

Deck area with General Appraisal (GA) of 5 and percent legal load \geq 100% is 118,739 square feet.
Of this 4% will become deficient each year.

Cost per year = $4.0\% \times 118,739 \times \$175.00 = \$831,173.00$

Floor Condition (FC):

Deck area with Floor Condition (FC) of 2 and GA $>$ 5 is 252,532 square feet.
Of this 1.5% will become deficient.

Cost per year = $1.5\% \times 252,532 \times \$95.00 = \$359,858.10$

Wearing Surface (WS):

Deck area with Wearing Surface (WS) of 2 and GA $>$ 5 is 421,003 square feet.
Of this 1.5% will become deficient.

Cost per year = $1.5\% \times 421,003 \times \$32.00 = \$202,081.44$

Protective Coating System (PCS):

Deck area with Protective Coating System (PCS) of 5 & 6 and GA $>$ 5 is 36,468 square feet.
Of that 7.5% will become deficient each year.

Cost per year = $7.5\% \times 36,468 \times \$20.00 = \$54,702.00$

TOTAL COST OF STEADY STATE PER YEAR = $\$1,447,814.54$

TO CORRECT CURRENT DEFICIENCIES:

General Appraisal (GA):

General Appraisal (GA) deficiency: 424,086 square feet.

Cost to correct current GA = $424,086 \times \$175.00 = \$74,215,050.00$

Floor Condition (FC):

Floor Condition (FC) deficiency: 21,259 square feet

Cost to correct current FC = $21,259 \times \$95.00 = \$2,019,605.00$

Wearing Surface (WS):

Wearing Surface (WS) deficiency: 64,595 square feet

Cost to correct current WS = $64,595 \times \$32.00 = \$2,067,040.00$

Protective Coating System (PCS):

Protective Coating System (PCS) deficiency: 130,116 square feet.

Cost to correct current WS = $130,116 \times \$20.00 = \$2,602,320.00$

TOTAL COST TO CORRECT CURRENT
DEFICIENCIES = $\$80,904,015.00$

Bridge data for Lucas and Wood County only not on State System

Total deck area: 1,601,575 square feet

Degradation Rates:

Deck area with General Appraisal (GA) of 5 and percent legal load $\geq 100\%$ is 118,739 square feet of which 4% will become deficient.

Deck area with Floor Condition (FC) of 2 and $GA > 5$ is 252,532 square feet of which 1.5% will become deficient.

Deck area with Protective Coating System (PCS) of 5 & 6 and $GA > 5$ is 36,468 square feet of which 7.5% will become deficient.

Deck area with Wearing Surface (WS) of 2 and $GA > 5$ is 421,003 square feet of which 1.5% will become deficient.

Current Deficiencies:

General Appraisal (GA) deficiency: 424,086 square feet

Floor Condition (FC) deficiency: 21,259 square feet

Wearing Surface (WS) deficiency: 64,595 square feet

Protective Coating System (PCS) deficiency: 130,116 square feet.

Unit Costs:

General Appraisal (Structure replacement) \$175.00/square feet

Floor Condition (Deck replacement) \$95.00/ Square feet

Wearing Surface (concrete wearing course replacement) \$32.00/ Square feet

Paint structural steel (3 different coats, prime, intermediate, & finish) \$20.00/Square f