# RMA Bridge Asset Deficit Report At-a-Glance

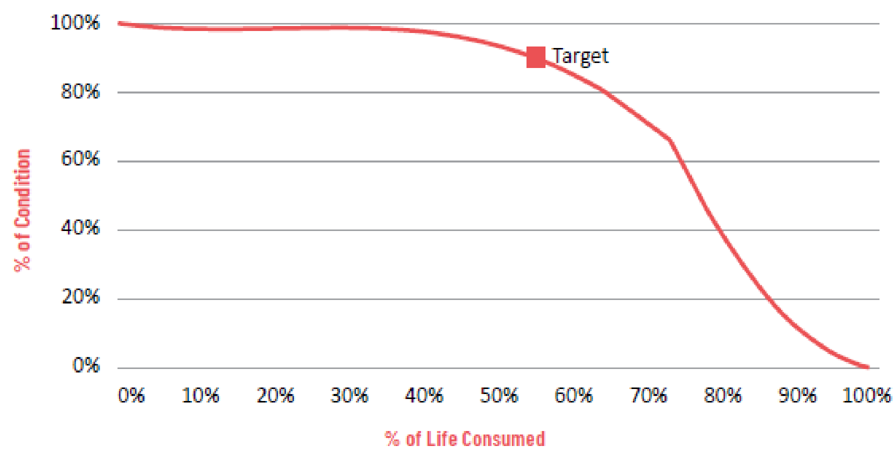
*August 2024*

The RMA's Rural Municipal Infrastructure Deficit Project consists of four reports examining the funding gap that exists between the current condition state of rural municipal infrastructure and an ideal condition state. The first report released as part of the project is the Bridge Asset Deficit Report.

This At-a-Glance document provides an overview of the report's results. For details on the project, the methodology, and the significance of the findings, read the full report, available on the RMA website and through this link.

## Methodology and Data

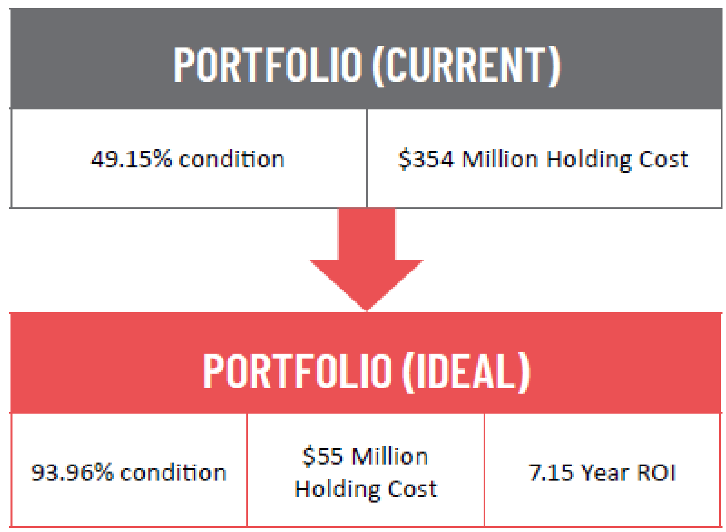
- Data sources: Alberta Transportation's Bridge Information System and municipal bridge data.
- Total number of relevant bridge structures within analysis: 8,334.
- Bridges inspected prior to 2023 were manually aged to represent their expected condition and life consumed in 2023. Only 16.77% of bridges were inspected in 2023 or 2024.
- The report measures the condition of the bridge portfolio with an asset deterioration curve that uses a combination of "life consumed %" and "condition %" to determine the condition rating of the asset.
- The curve is more reflective of the actual infrastructure deficit than straight-line deterioration used for accounting purposes. It reflects the reality that as assets reach varying points in their lifespan, degradation intensifies.
- The curve allows identification of an optimal "target" point that will allow for assets to be maintained efficiently, before the asset curve steepens and annual costs to maintain the asset in its current condition (holding cost) increase.




- The target point on the curve used in the project is 94% condition rating.
- The infrastructure deficit is measured by subtracting the observed condition value based on the asset portfolio's observed condition rating from the value associated with the target point condition rating.

## Results

- The overall rural municipal bridge portfolio is at a current condition rating of 49.34%.
- The portfolio's effective age is 41.95 years, based on an average useful life of 54.05 years.
- The holding cost (annual amount required to maintain the portfolio at its current level and avoid further degradation) is $373.14 million. The holding cost for the optimal target condition rating (94%) is just $55.71 million per year.
- Based on the full replacement value of the bridge portfolio ($5.14 billion), the value of the bridge portfolio at the 94% target state ($4.83 billion), and the current value based on actual condition ($2.54 billion), the overall rural municipal bridge infrastructure deficit is $2.29 billion.
- This means it would require a one-time $2.29 billion investment to return the full bridge portfolio to the 94% condition rating.
- Due to the significantly lower holding cost at 94%, there would be a return on investment of the $2.29 billion in 7.15 years.
- Actual current bridge condition does not vary significantly by sub-type, region, traffic count, or manager.




## Future Projection

- Based on average provincial investment (through grant funding) in roads and bridges over the past several years, the report projects that the bridge portfolio is at risk of deteriorating significantly in the next five years based on its current point on the deterioration curve.
- In 2028, life consumed will increase to 86.3% and condition will decrease to 21.1%.
- The value of the portfolio will decrease to just $1.08 billion.
- The one-time cost required to return the portfolio to ideal 94% condition will increase to $3.76 billion.

## What's Next

The RMA will release similar reports on rural road and utility infrastructure in the coming weeks. The project will culminate with a final report with an overall rural municipal infrastructure deficit along with policy recommendations.