



Nicaragua

MCC Learning from

“Evaluation of MCC’s Investments in Transportation in Nicaragua: Final Report”

Jonathan Alevy 2007

MCC has identified the following programmatic and evaluation lessons based on the Evaluation of MCC’s Investments in Transportation in Nicaragua: Final Report.

PROGRAMMATIC LESSONS

- The roads project selection process should include an upfront national or area-wide road network analysis based on selected criteria such as traffic volume, IRI and other parameters, in order to prioritize potential road investments that are proven to be economically viable.
- It is important to consider alternative interventions that may prove to be relatively more cost effective and economically viable than simply paving a road.
- It is critical to comprehensively address policy and institutional constraints in road maintenance as well as seek assurances from the partner countries that the necessary mechanisms to ensure sustainability of their existing roadway network are in place prior to MCC committing to a capital-intensive road investment project.
- MCC recognizes the need to better understand actual road maintenance practices and their effects on the long-term costs and benefits of roads. Accordingly, MCC’s Infrastructure Practice Group is planning a series of country-specific road maintenance studies, which will be used to improve both the economic assessment of road investments and, where feasible, influence actual road maintenance planning and execution in partner countries.
- Project teams must ensure complete and high quality data is collected both for HDM-4/RED ERR modeling purposes that feed into project selection and design, and for M&E purposes during and after implementation. The HDM-4/RED models should be based on fully developed feasibility studies that provide accurate cost and time estimates and other reliable technical inputs. They must also be well developed and calibrated at the feasibility study stage and continue to be updated as costs and other design parameters change throughout the construction stages and post-project completion.
- The value of roads investments can be optimized by enforcing standards for design review by technical experts and quality assurance and control requirements. Roads teams should also consider alternative forms of engineering contracts and project delivery systems that may improve the quality of contractor feasibility, design and supervision.



EVALUATION LESSONS

- Investment decisions, and the ERRs informing them, should be based on final design cost estimates. Prior cost estimates and designs based on pre-feasibility studies often led to overly risky investment decisions.
- Safety benefits were not taken into consideration in the calculation of the post-compact ERRs. In the future, and to the extent that safety-related information is available, MCC plans to incorporate the economic benefits of road safety into ERR calculations when the needed information is available.
- The decision of when and what data should be collected should be driven by the logic of the investment and a good critical sense of how to gather information cost-effectively. Some markets may respond gradually to improved road conditions, therefore, using traffic counts collected less than two years after road completion may not allow sufficient time to detect important effects of road improvements. As MCC designs transportation projects and their evaluations, outcome measures should be carefully chosen to cost-effectively and credibly assess the stated economic justification of road investments.
- Plans for post-investment road ERR evaluations should be subjected to a formal review process that requires (among others) substantive review and clearance by sector specialists of key evaluation documents to provide feedback on the technical and factual accuracy of evaluation plans. This approach should ensure that the selection of the Highway Development and Management (HDM-4) vs. RED models to estimate the long-term costs and benefits of the road investments is appropriate to the characteristics of the road to be evaluated.
- Many of these lessons are similar to those that MCC has learned from previous evaluations. As a result, MCC has already adjusted its evaluation practices to include a formal review process for evaluations, an evaluation risk assessment, and use of standardized evaluation templates. The new process also requires substantive review and clearance of key evaluation documents by sector specialists in order to incorporate feedback on the technical and factual accuracy of evaluation plans.