



Biodiversity Guidance for Road Corridor Investments: Mobilizing New Data from the Global Biodiversity Information Facility

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This review verifies the reproducibility of the exhibits included in the paper “*Biodiversity Guidance for Road Corridor Investments: Mobilizing New Data from the Global Biodiversity Information Facility*”.

Contents in this review:

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Main findings

- **Every exhibit has been reproduced accurately.**
- The code was successfully executed on a new computer after:
 1. Opening the Rproject.
 2. Restoring the dependencies environment.
 3. Running the code.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 10 hours to run.
- We conducted our reproducibility analysis based on the paper shared by the authors by email on October 9th.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on 1 type of data: open data.
 - Open data is included in the public reproducibility package. (The code directly downloads some of the data)
 - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks.
- **Reproducibility Summary:**
 - **Data:** All data sources are publicly available and included in the reproducibility package.

- **Code:** All code files (from cleaning to analysis) are included in the reproducibility package.
- **Outputs:** All outputs are generated by code included in the reproducibility package.
- **Dependencies environment:** The reviewers created a new environment using the latest versions of dependencies available at the moment of the review.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Figure 1: Panel A-D** Reproduced.
- **Figure 2: Panel A-B** Reproduced.
- **Figure 3: Panel A-B** Reproduced.
- **Figure 4: Panel A-D** Reproduced.
- **Figure 5: Panel A-D** Reproduced.
- **Table 1** Reproduced.
- **Table 2** Reproduced.
- **Table 3** Reproduced.
- **Table 4** Reproduced.
- **Table 5** Reproduced.

Reproduction Environment

Paper exhibits were reproduced on a computer with the following specifications:

- OS: Windows 11 Enterprise
- Processor: Processor INTEL(R) XEON(R) PLATINUM 8562Y+, 2800 Mhz, 16 Core(s), 16 Logical Processor(s)
- Memory available: 128 GB
- Software version: Stata 18.0 MP, R 4.4.1