The Life-Cycle Cost Evaluation Tool (LCCET) is a spreadsheet based tool that can:

- Help practitioners estimate the life-cycle costs and benefits of infrastructure projects.
- Consider a wide range of intersection configurations, including traffic signals, roundabouts, and innovative designs, such as median u-turns.
- Account for local cost parameters for construction, operations, and social factors.

The LCCET and B/C analysis provides:

- Consistent framework for comparing outcomes.
- Dollar values to monetize outcomes.
- Outcomes based on market values.
- Present value of project costs over entire project lifetime.
- Comparison of outcomes over time by discounting future costs.
- Results that are understandable to decision-makers and the general public.

LCCET Costs Considered:

- Planning and Preliminary Engineering.
- Construction and Right-of-way.
- Ongoing operations and maintenance.
- User and societal costs (delay, safety, etc.).
- Other costs significant to local jurisdiction.

LCCET Potential Applications:

- Programming, prioritizing, funding decisions across a large area.
- Alternatives evaluations for corridors and subareas.
- Signal retiming study along corridor.
- Intersection maintenance, replacement, upgrade.

Example Application: Roundabout vs Signal

Alternative 1: Multilane Roundabout

- Construction Costs: $131,724,932
- Benefits/Costs: n/a

Alternative 2: Enhanced Signalized Intersection

- Construction Costs: $131,099,984
- Benefits/Costs: $13,03

Net Present Value: $1,439,572