

UPDATE ON THE TRANSIT FLEET ELECTRIFICATION FEASIBILITY STUDY

Transportation Advisory Commission
June 24, 2021

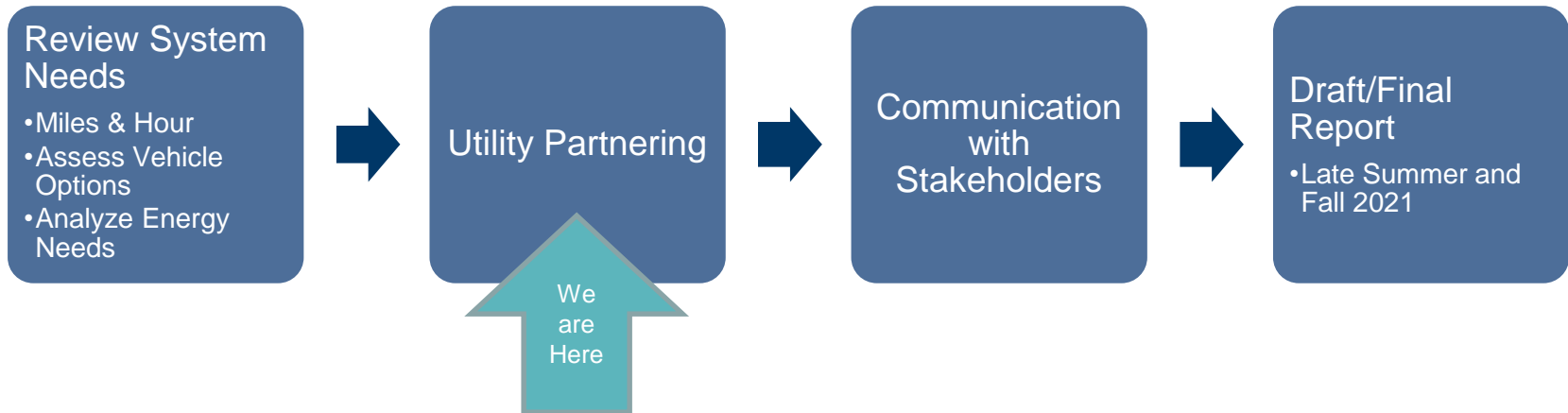




Project Goal

Department of Transportation

Project Goal: Identify needs and roadmap to help guide the implementation of a zero emission fleet



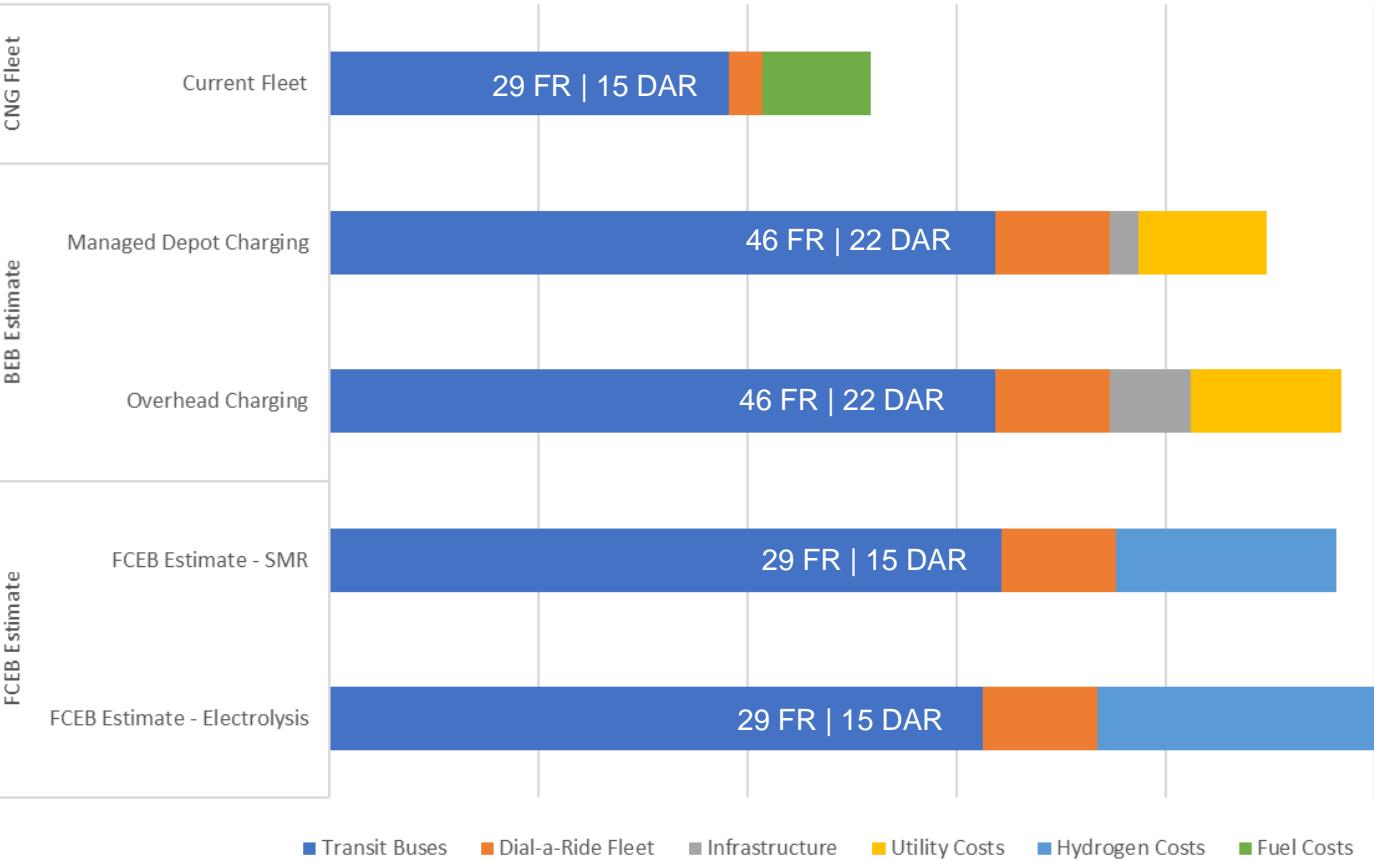


Initial Assessment

Department of Transportation

Lifetime Cost Comparison

0 10,000,000 20,000,000 30,000,000 40,000,000 50,000,000



Assumptions

- **Range**
 - > FR: 120-185 Miles Per Day
 - > DAR: 140 miles Per Day
- **Charging**
 - > Managed charging at City owned facility
 - > Overhead charging at off-site locations
- **Cost**
 - > Infrastructure includes only cost for chargers not installation
 - > All buses and chargers purchased in year one
 - > Overhead charging costs do not include increased labor to shuttle buses to off-site charging
 - > Hydrogen infrastructure cost not included



Initial Assessment

Department of Transportation

- **Transit Operations & Maintenance Facility**
 - > Essential need in order transition to zero emission
 - > Significant infrastructure required
- **Resiliency**
 - > Need resiliency to protect against grid outages
 - > Initial Strategies:
 - Microgrid
 - Energy storage
 - Generators
 - > Standby charges



Next Steps

Department of Transportation

- Continue coordination with Water and Power
- Conduct outreach phase this summer
- Complete the draft plan this summer with the final report complete by the fall in time for potential grant applications.



Conclusion

Department of Transportation

- Any general comments or concerns about the plan to transition to zero emission buses?