Improving Shared-ride Mobility Services through Bi-criterion Path-finding

This webinar will detail the underlying operational problem, modeling approach, computational results, implications for mobility service providers and transportation planners/policymakers, and future research directions. The computational results compare the proposed path-finding approach with the conventional shortest path approach in terms of user wait times and in-vehicle travel times along with fleet VMT and fleet utilization.

In our study, we explicitly incorporate path-finding into the operational problem and consider both travel time and proximity to future demands on paths. This non-myopic approach implicitly incorporates future information about the system into the control function.

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