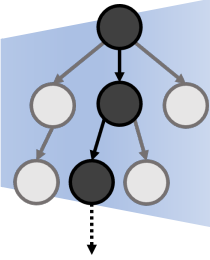
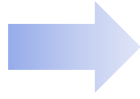


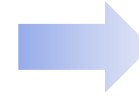


Real-Time Transit Planning



Planning Algorithm (MCTS)

- Rewards
- Constraints
- Possible futures
- Trip assignments



Planning Result

Assign the passenger to:

- Vehicle 1
- **Vehicle 2 (best)**
- ...
- Vehicle 10

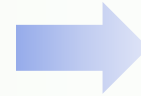


Domain Expert (Transit Engineer)

- Understands query
- Examines algorithm
- Considers alternative
- Conducts additional planning
- Generates logic-guided response

“1. Is vehicle 2 still the best choice if there is congestion?”
 “2. Why isn’t vehicle 1 selected while it’s closer?”

LogiEx Planning Explainer



“Re: Q1: Yes, it is still the best choice because, relative to the alternatives, it most effectively meets long-term timing requirements.”

“Re: Q2: Vehicle 2 was selected because, over the long term, it better satisfies timing requirements for a larger number of passengers and has the potential to serve up to 50% more trips while reducing overall delay by approximately 15%.”