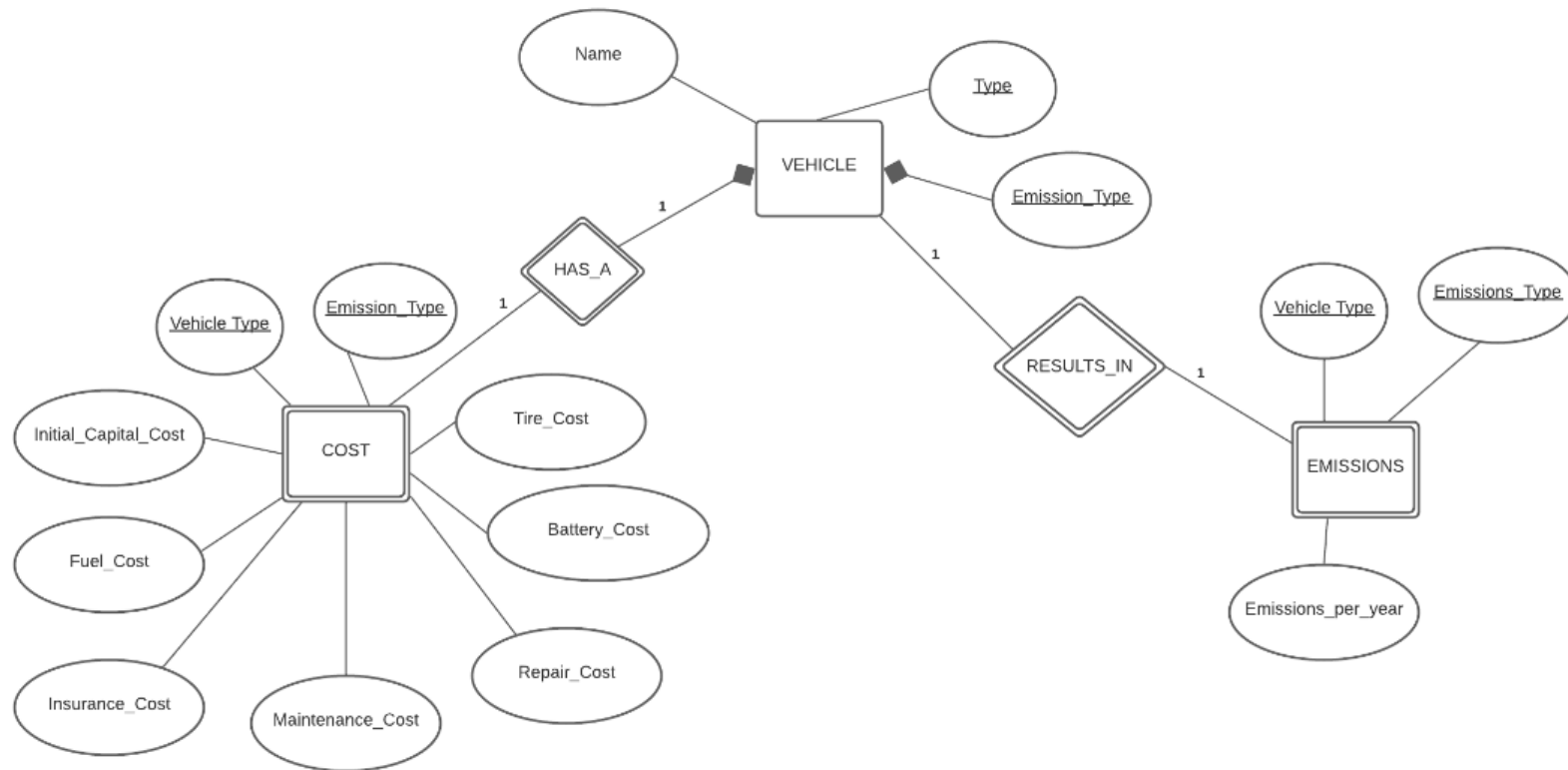


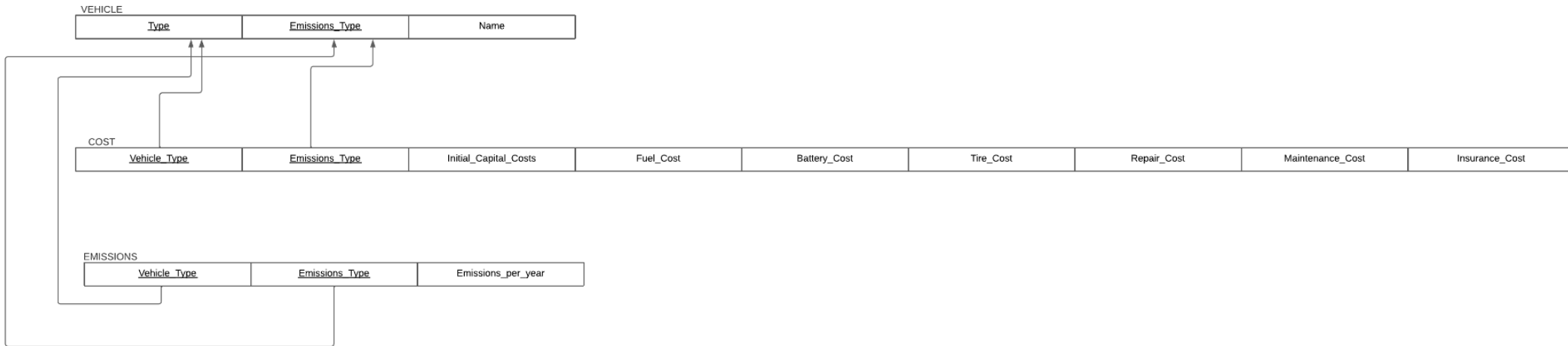
Stage III: Elaboration: Database Model

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ER Diagram



Relational Schema



- **Initial database size (approximate number of records)**
 - VEHICLE: 18 tuples, one for each combination of vehicle type and emissions type
 - COST: 18 tuples, one for each combination of vehicle type and emissions type
 - EMISSIONS: 18 tuples, one for each combination of vehicle type and emissions type
- **Types and average number of searches:**
 - In order to calculate the costs and emissions associated with each vehicle type & vehicle emissions type in the fleet, we will need to fetch its corresponding tuple in both the COSTS & EMISSIONS relations.
 - Since there are only 18 combinations of Vehicle type and Vehicle Emissions type, we will only need to perform at most 18 searches per year.
 - However, as fleet composition changes each year, we may need to perform these 18 searches repeatedly.