

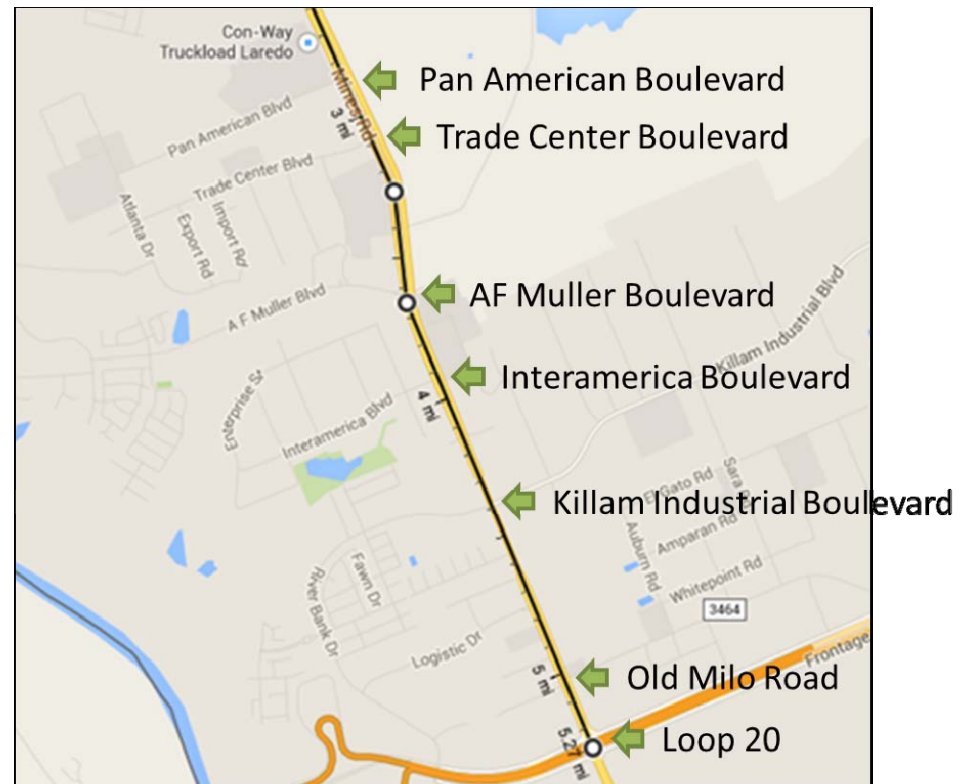
LAREDO PLANNING

FM 1472 MEDIUM-RANGE IMPROVEMENT STRATEGIES WITH HACHAR AND VALLECILLO

Previous Analyses

- Short-Term Strategies

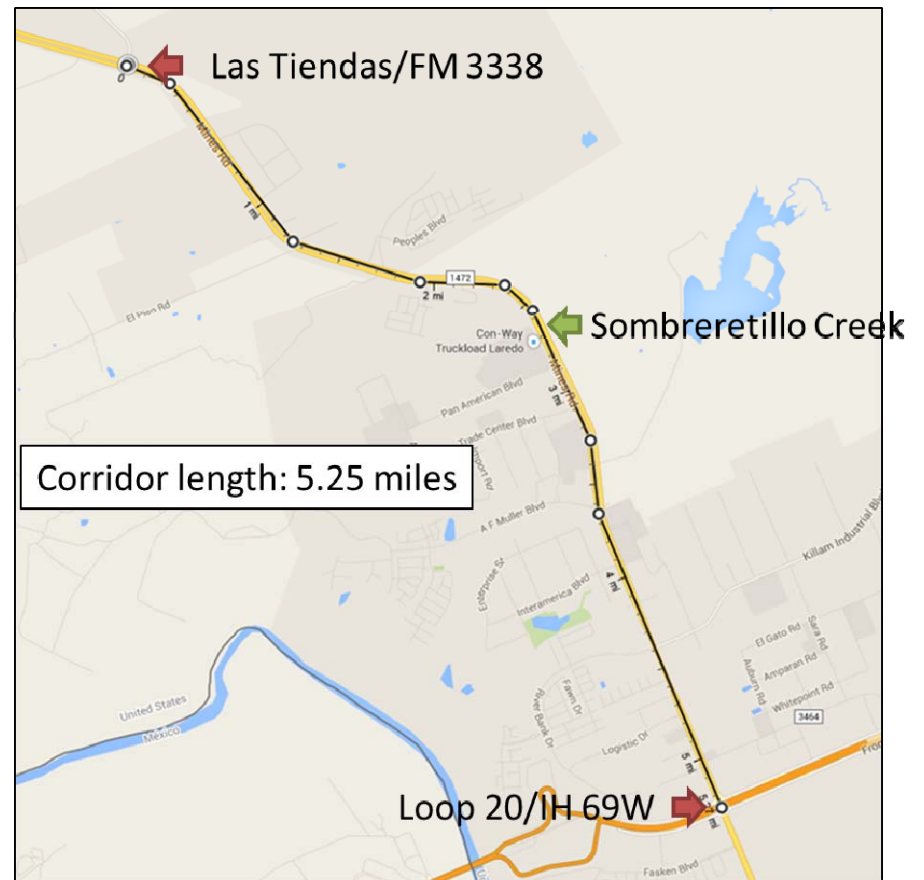
- Re-timing traffic signals
- Eliminating movements
- Modifying pavement markings



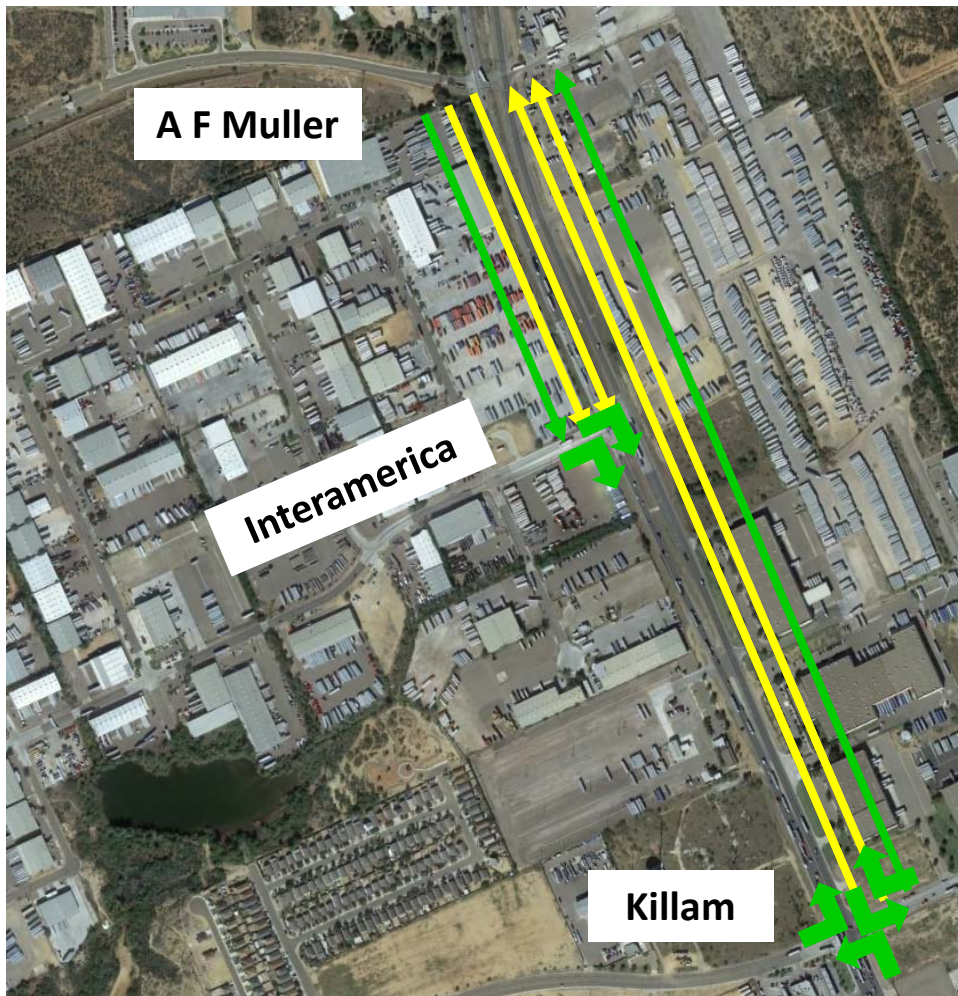
Previous Analyses

- Medium-Range Strategies

- Extend study area to Las Tiendas
- Focus on corridor performance
- Adding lanes
- Adding turning lanes
- Extending acceleration or deceleration lanes

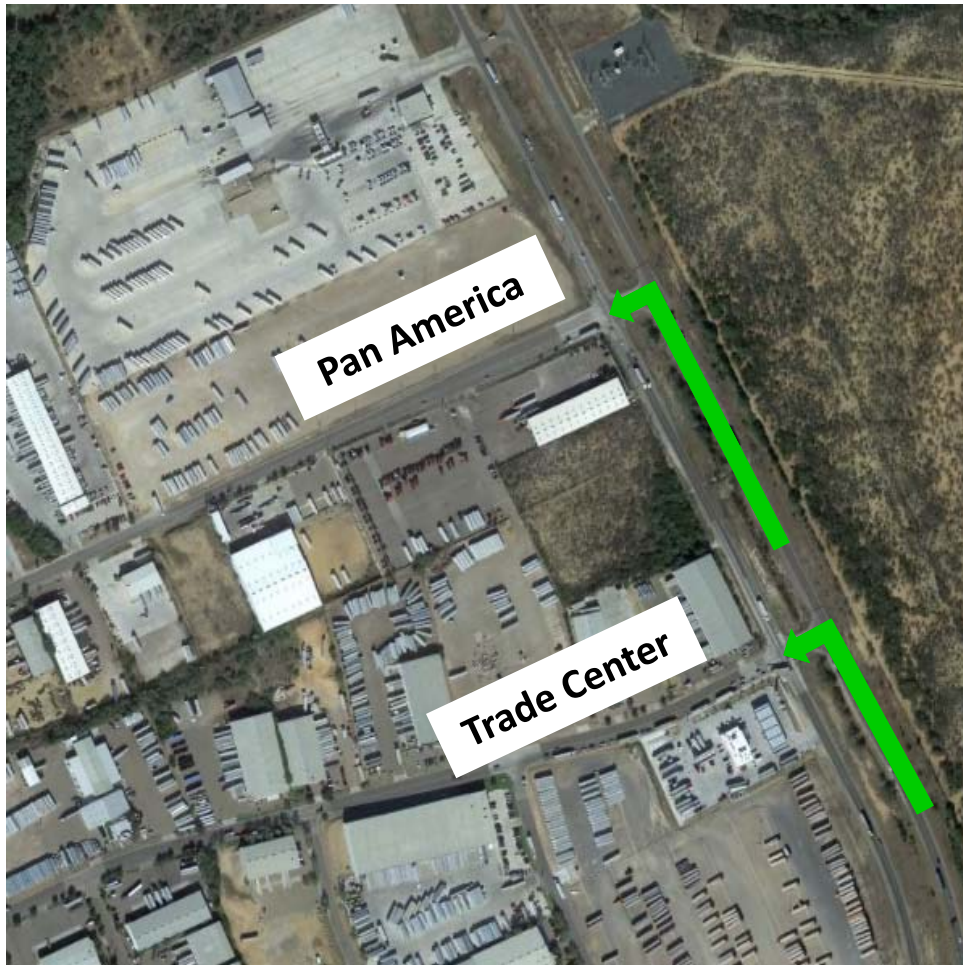


Selected Medium-Range Strategies



- Add third NB lane between Killam and Muller
- Add third SB lane between Muller and Interamerica
- Improve Killam intersection
- Dual EB to SB right-turn lanes at Interamerica
- Re-timing signals as needed

Selected Medium-Range Strategies

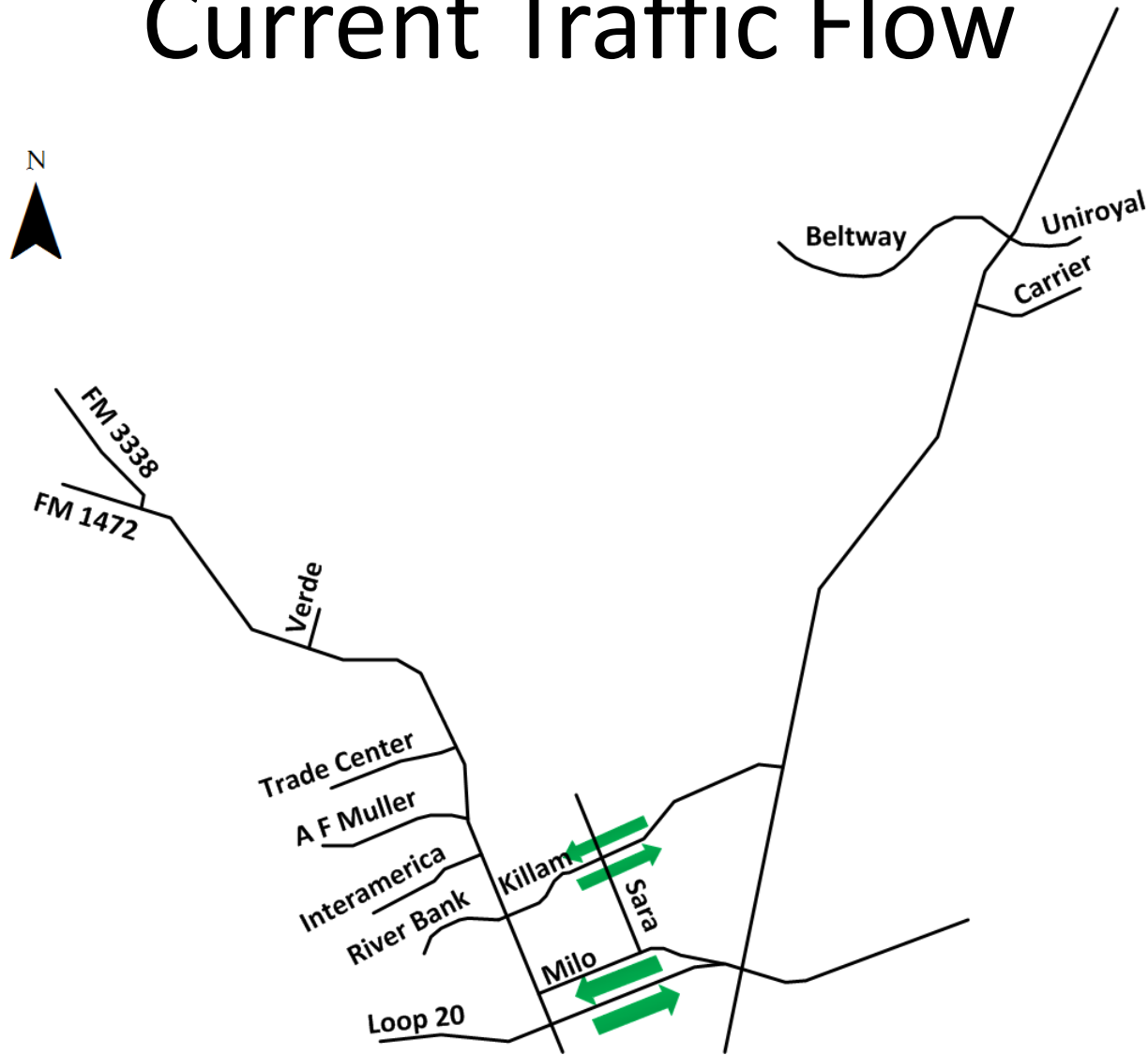


- Extend NB to WB left-turn bay at Trade Center
 - 975 ft. (storage, decel., and taper)
- Extend NB to WB left-turn bay At Pan America
 - 1133 ft. (storage, decel., and taper)

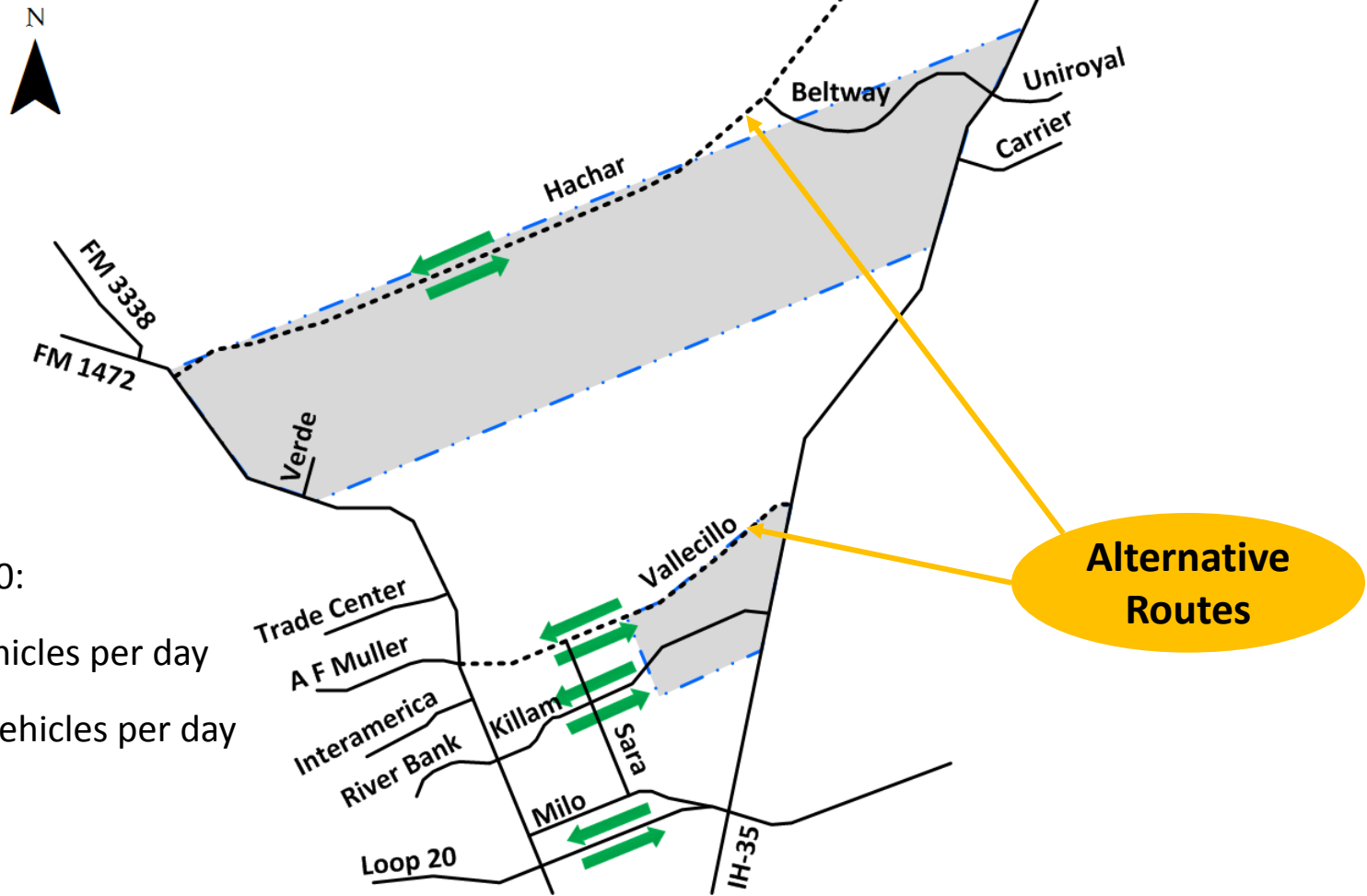
Supplemental Analysis to Medium-Range Strategies

- Locally-funded off-system highway strategies
 - Adding Hachar Loop
 - Adding Vallecillo Road
- Possible impacts
 - Serve as alternative routes
 - Stimulate local developments (new traffic generation)

Current Traffic Flow



Field-Data-Based Assumption

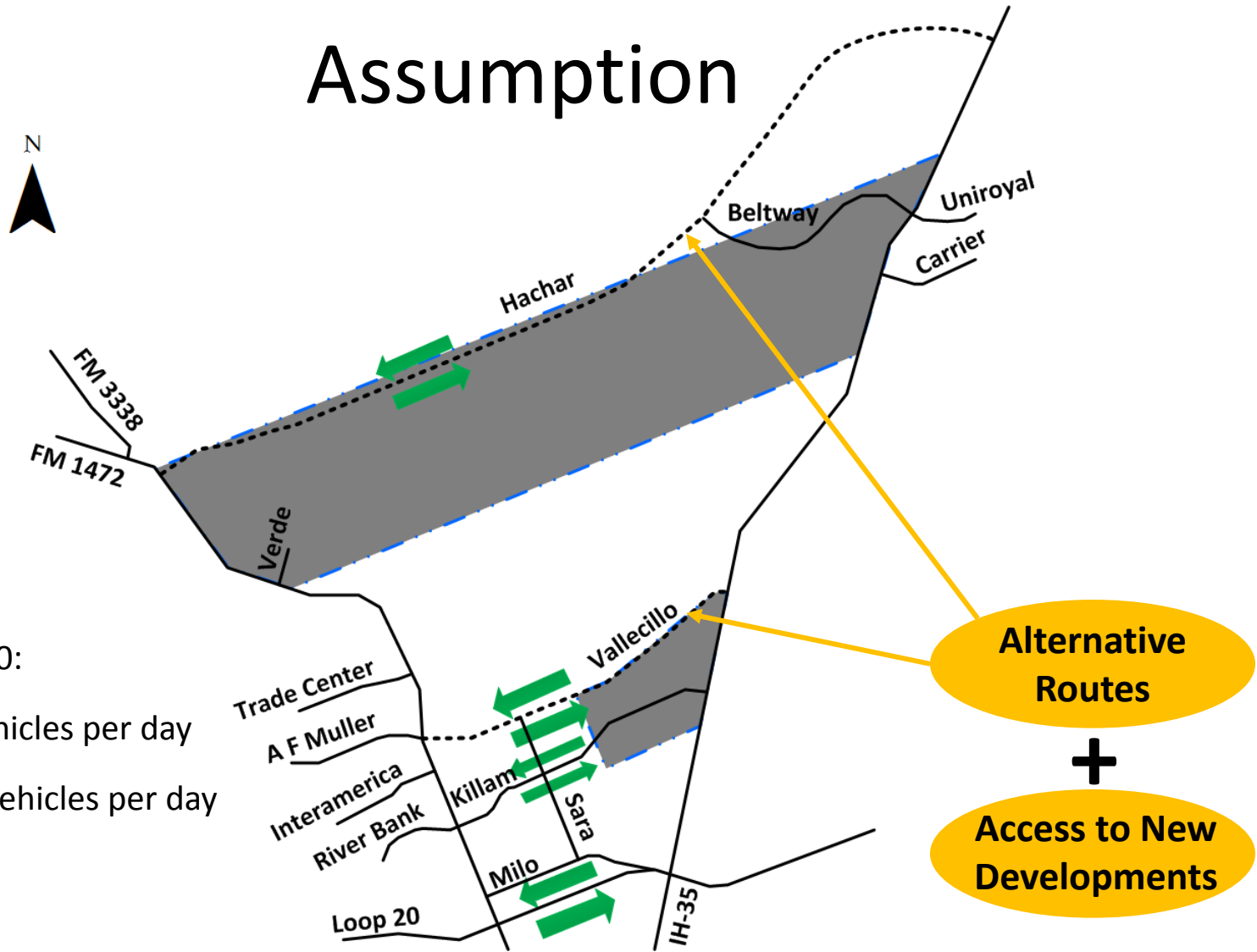


Daily Traffic in 2040:

Hachar: 14,200 vehicles per day

Vallecillo: 15,000 vehicles per day

Travel-Demand-Model-Based Assumption

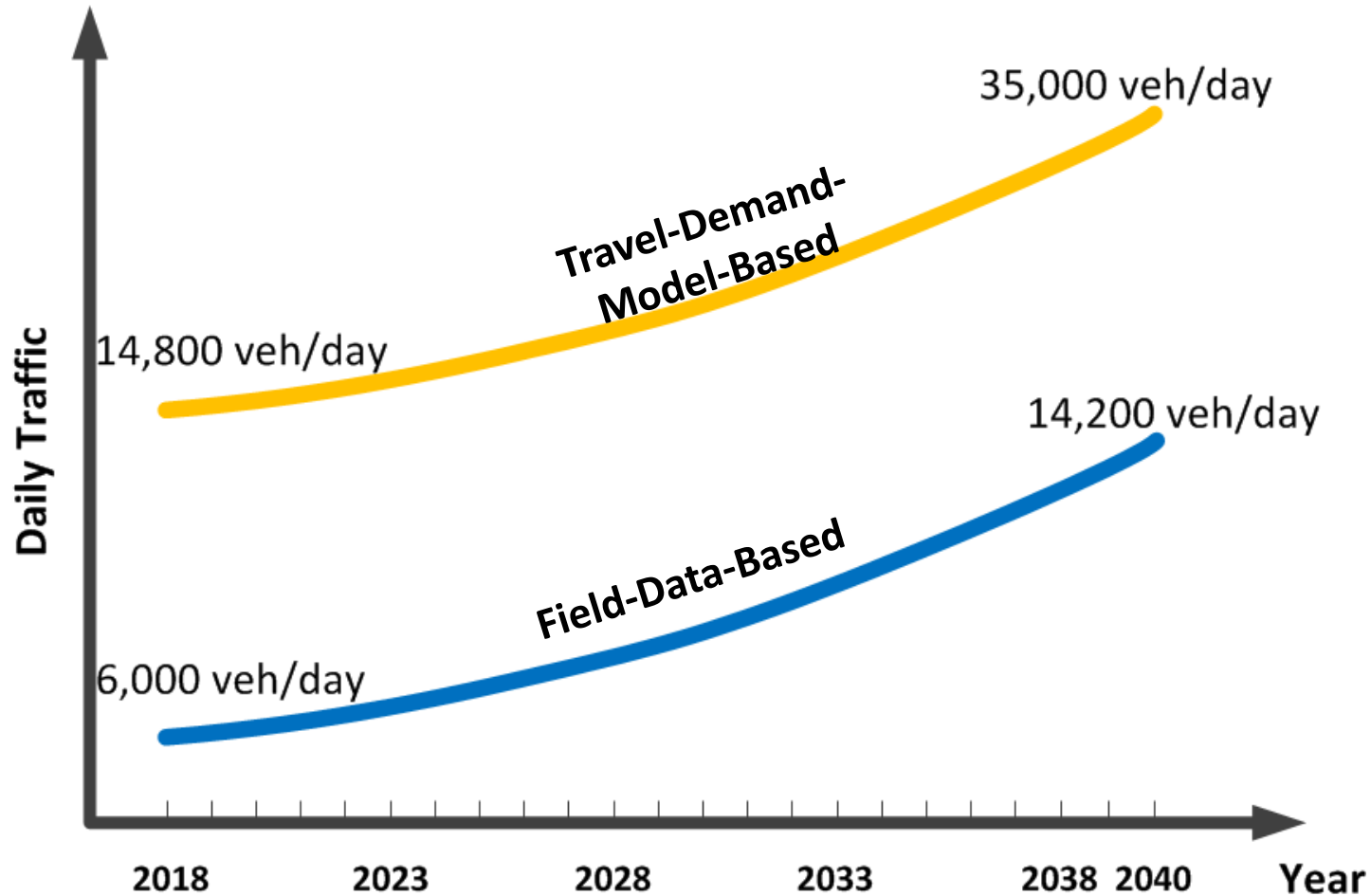


Daily Traffic in 2040:

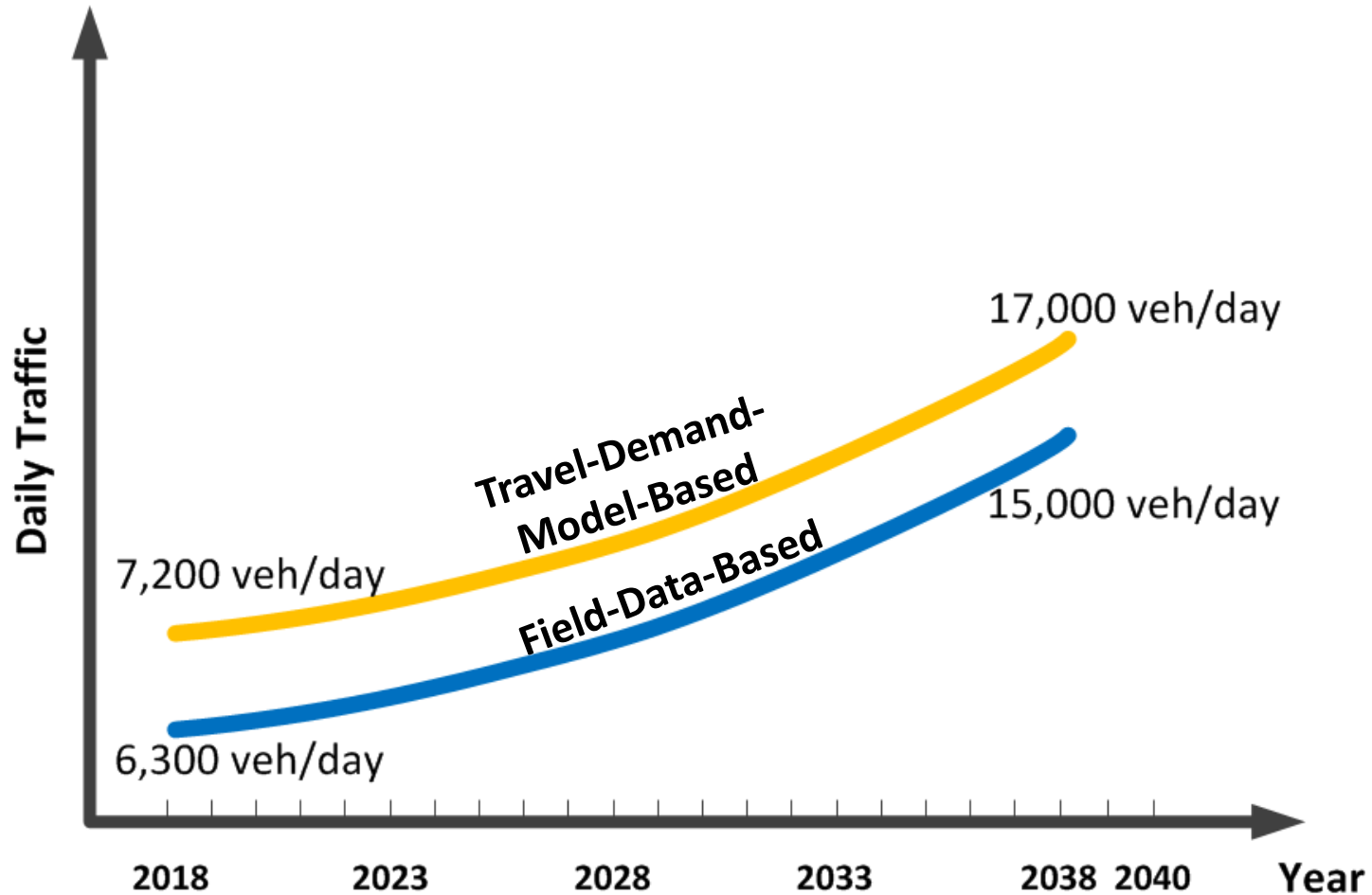
Hachar: 35,000 vehicles per day

Vallecillo: 17,000 vehicles per day

Future Traffic Growth Along Hachar



Future Traffic Growth Along Vallecillo



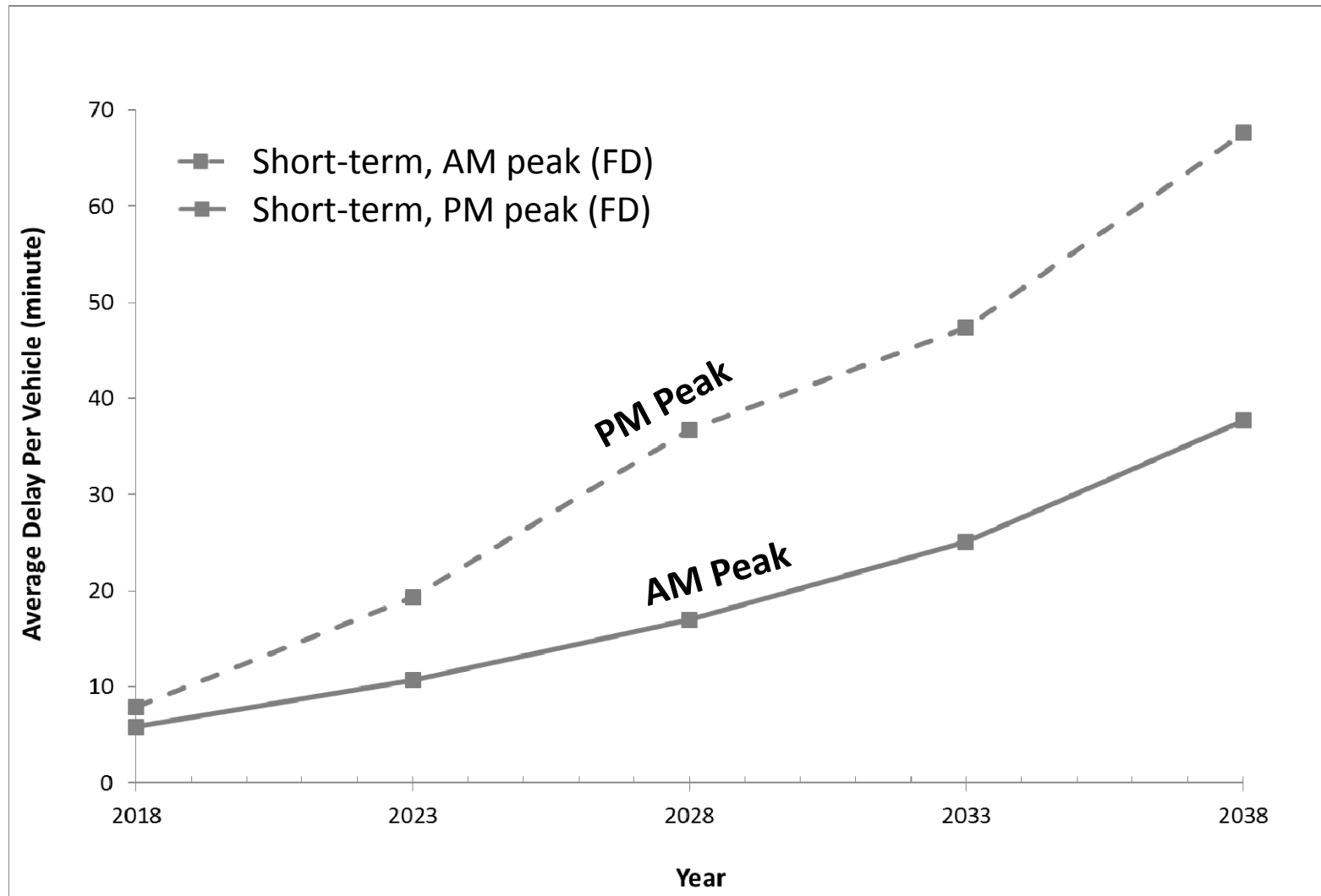
Scenarios

- Short term (FD-based)
- Short term + Hachar&Valecillo (FD-based)
- Short term + Hachar&Valecillo + Mid term (FD-based)
- Short term + Hachar&Valecillo (TDM-based)
- Short term + Hachar&Valecillo + Mid term (TDM-based)

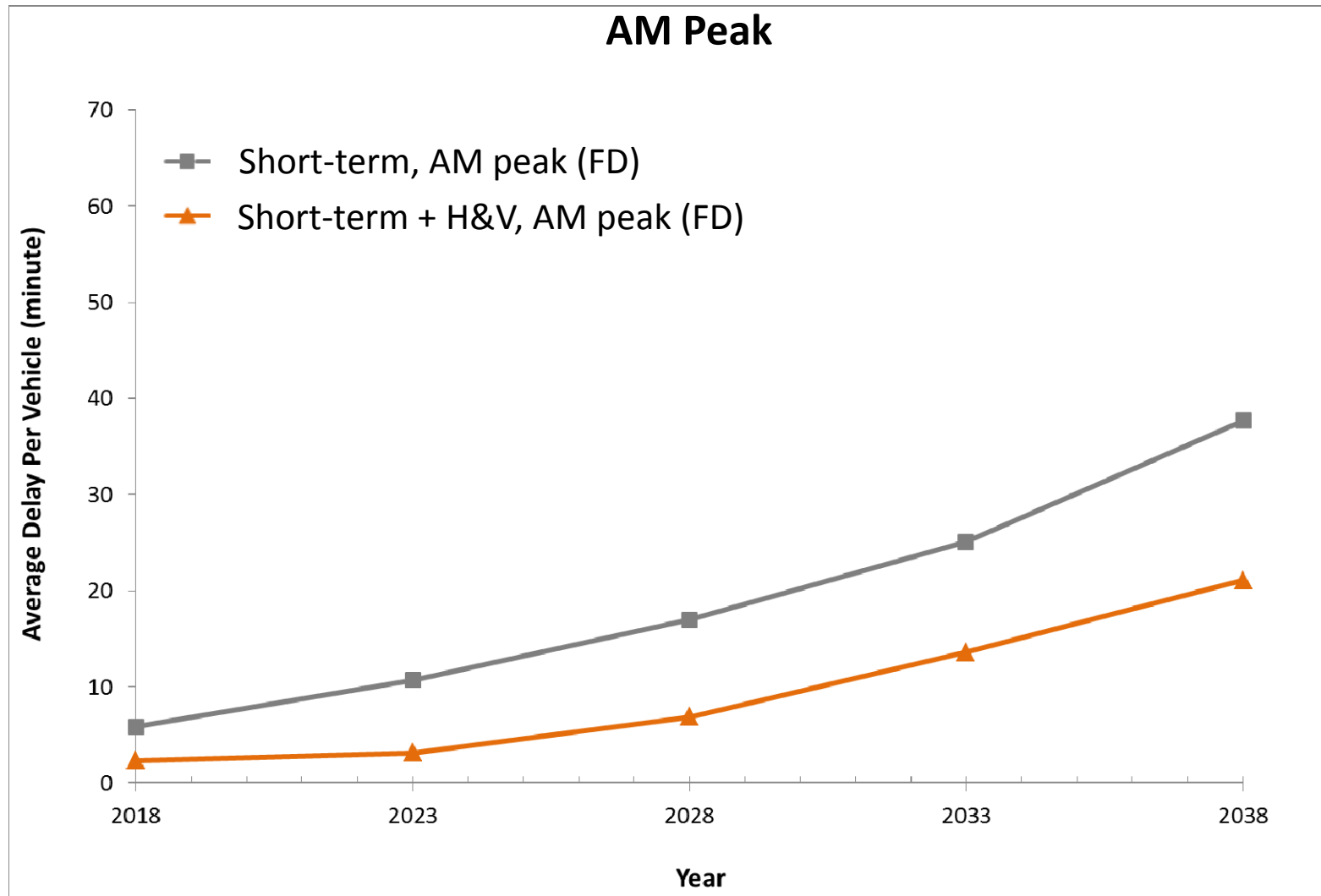
Note: FD – field data

TDM – travel demand model

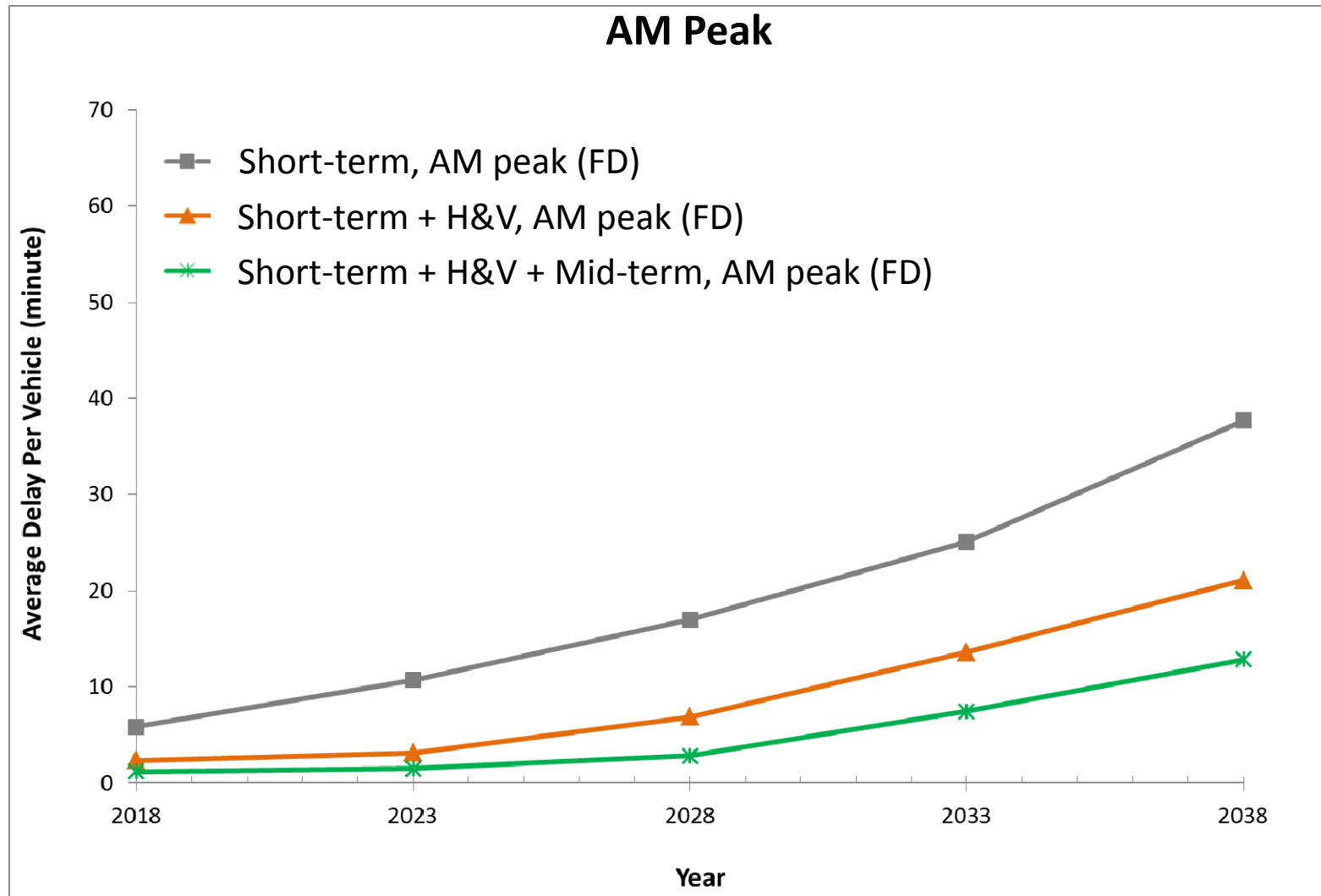
Simulation Results – Average Delay



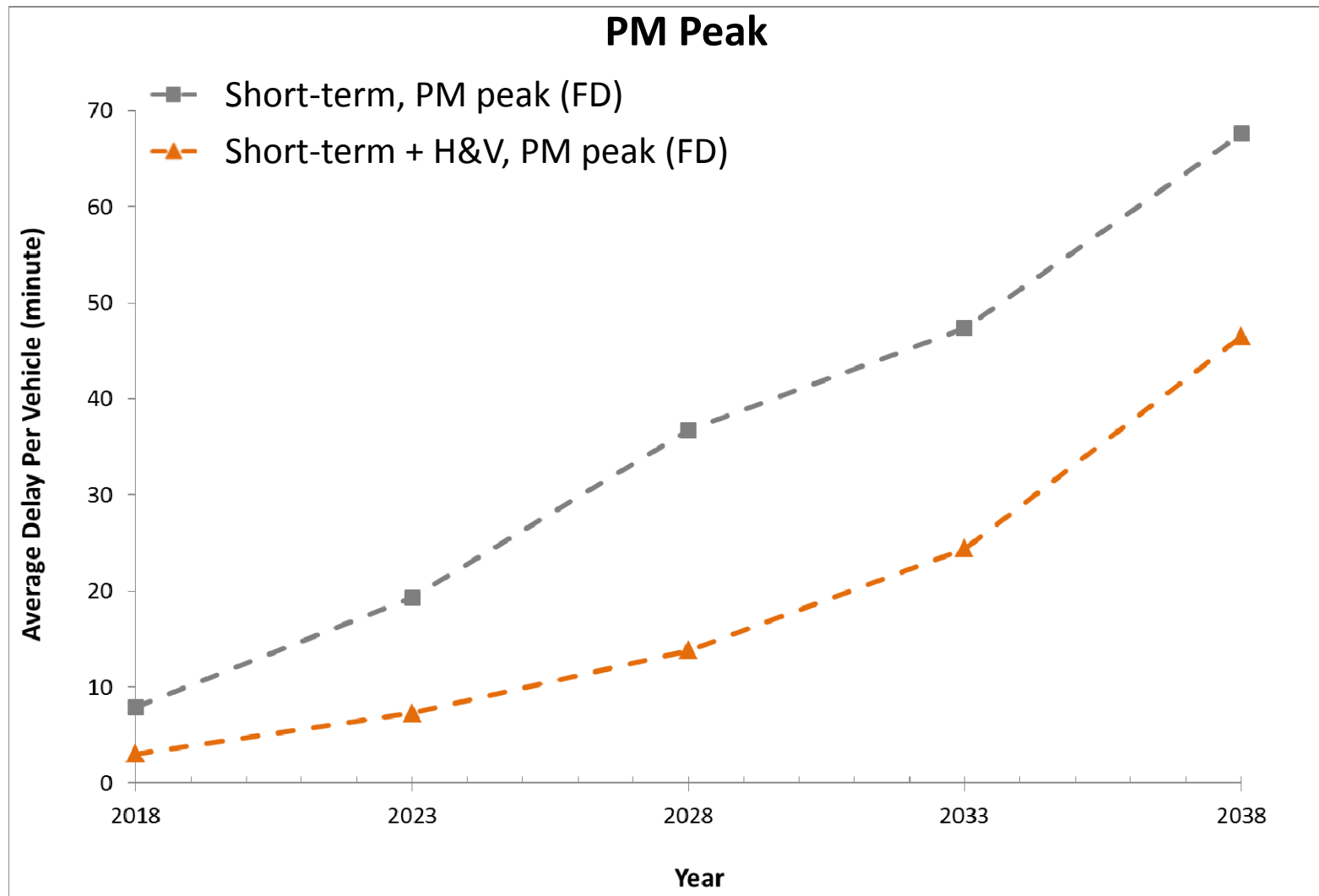
Simulation Results – Average Delay



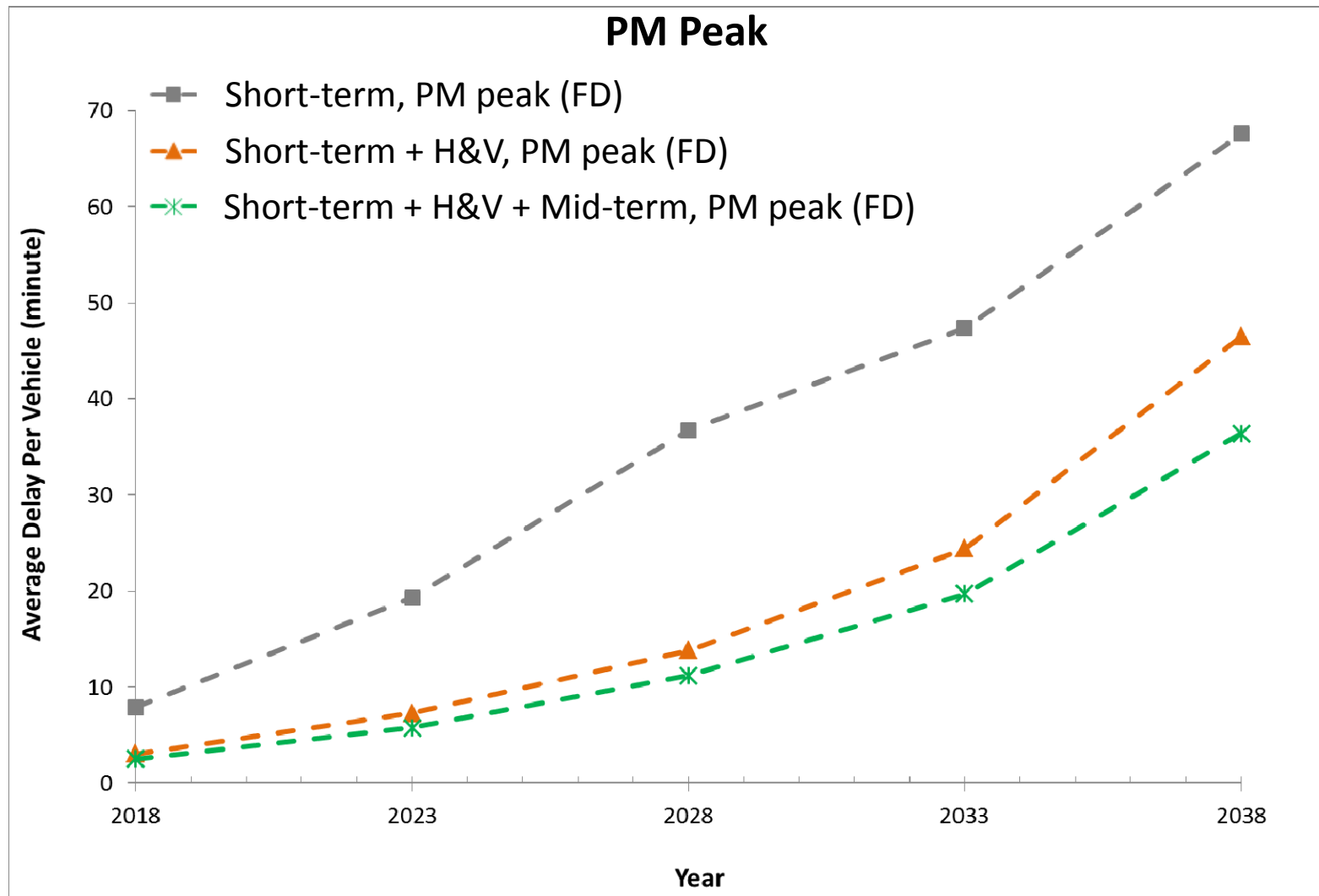
Simulation Results – Average Delay



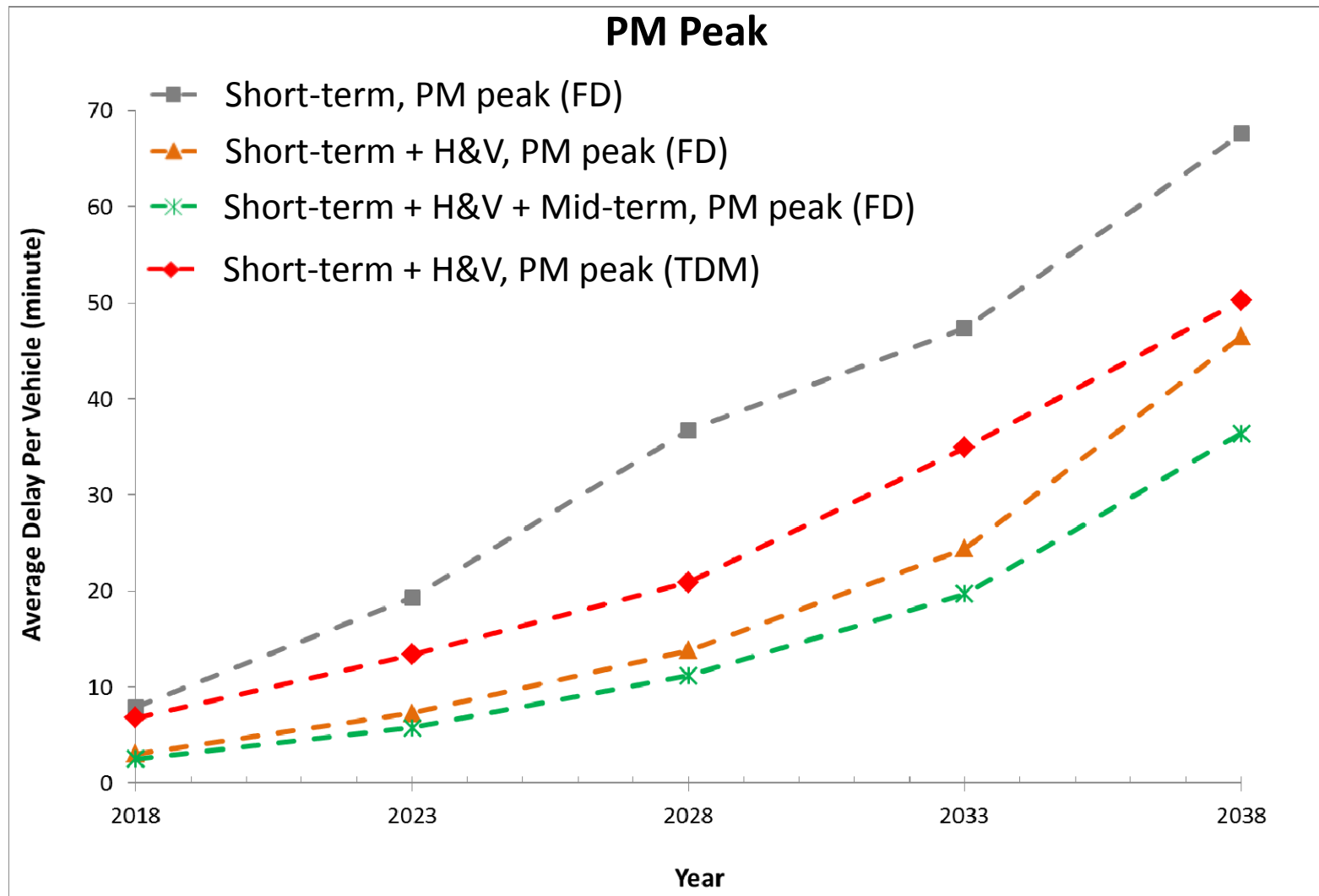
Simulation Results – Average Delay



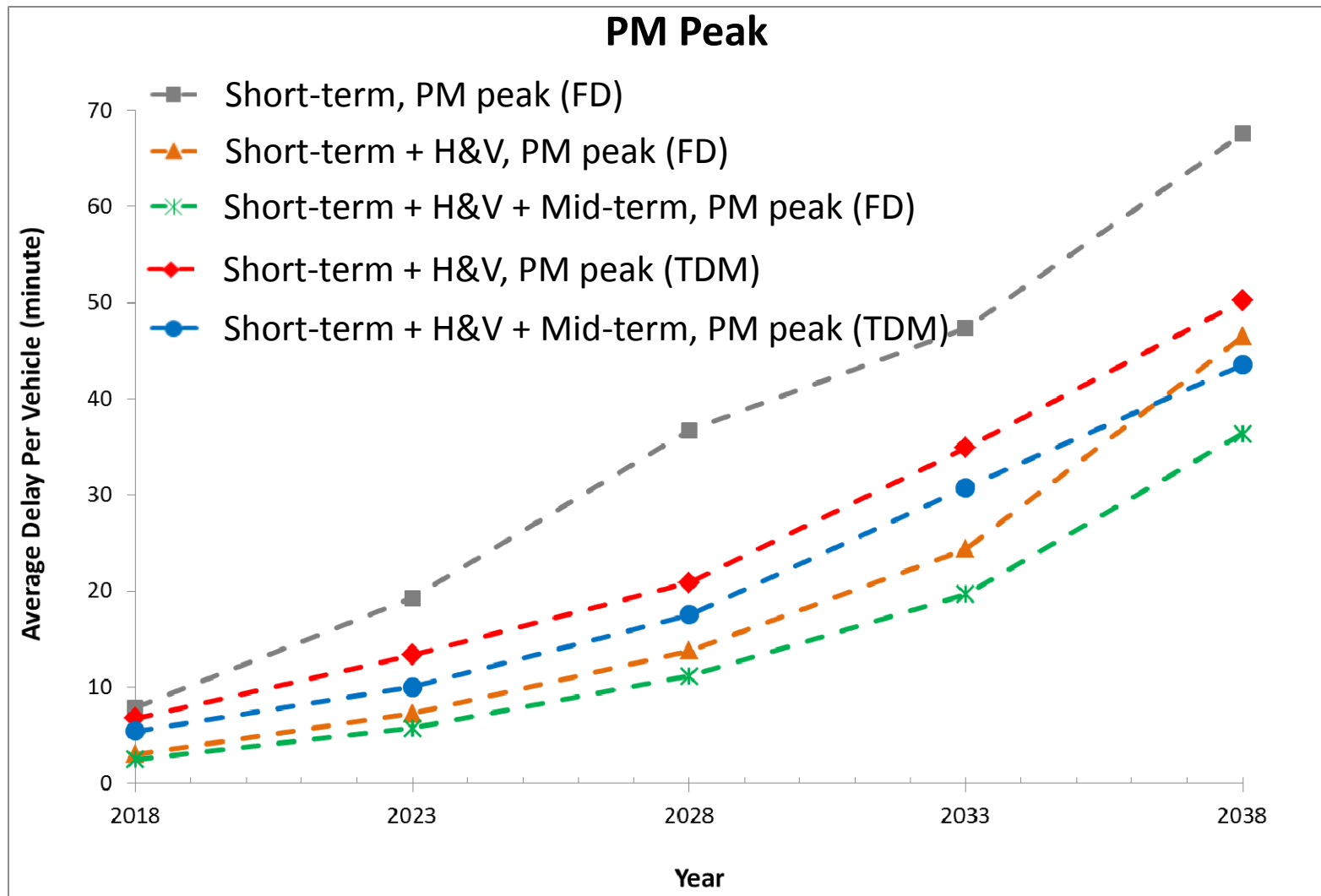
Simulation Results – Average Delay



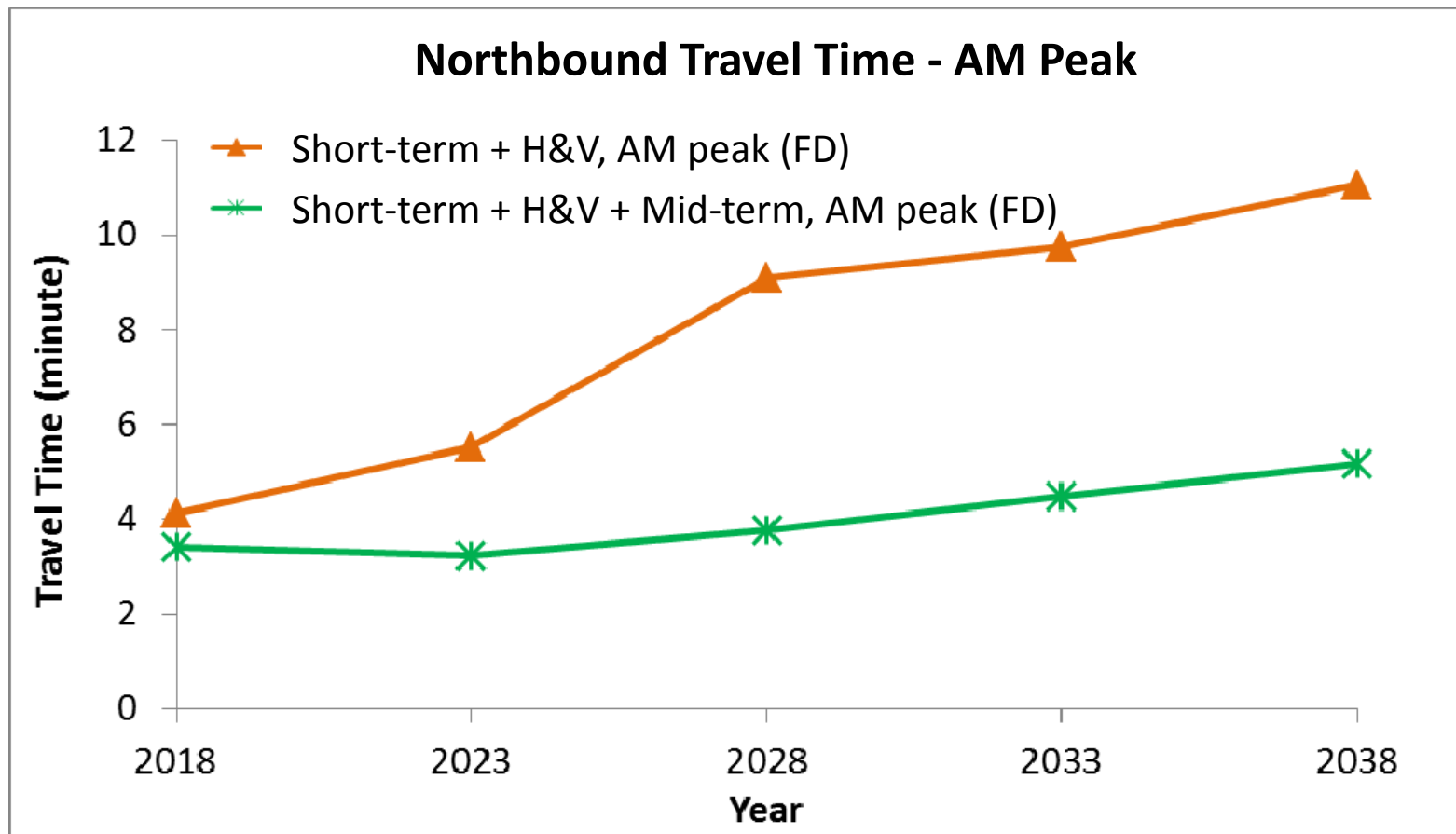
Simulation Results – Average Delay



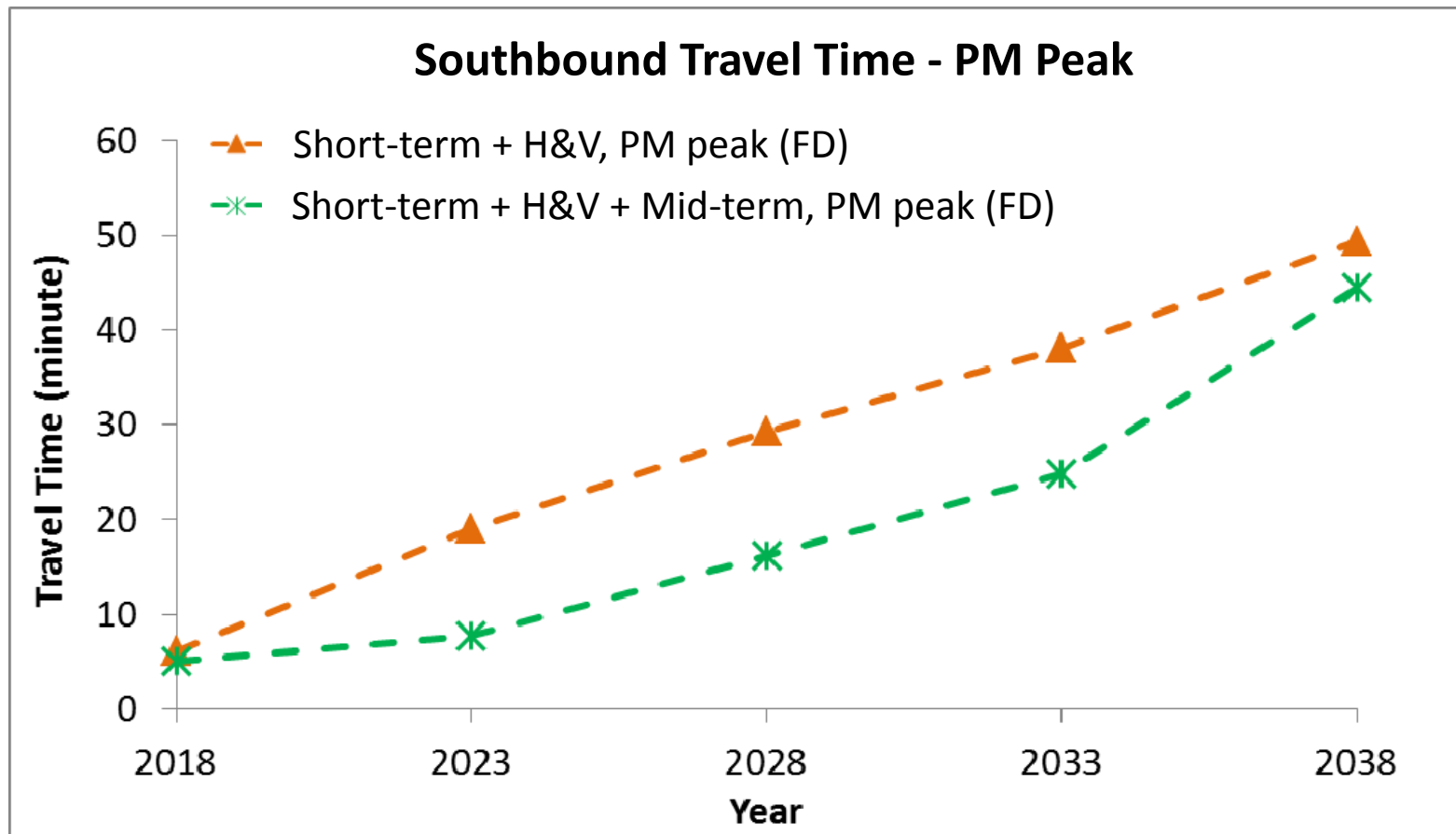
Simulation Results – Average Delay



Simulation Results – Travel Time on Mines Road (Killam to Con-way)



Simulation Results – Travel Time on Mines Road (Killam to Con-way)



Summary

- Hachar and Valecillo will initially provide additional mobility, although will generate new traffic over time
 - Future traffic pattern in the study area will depend on new land developments
 - Need additional evaluation of the intersection connections with FM 1472, e.g., exclusive right-turn lanes, etc.
- Medium term strategies will reduce average vehicle delay significantly
- Medium term strategies will reduce travel time between Killam and Conway significantly

Questions/Comments?