Nissan Zero Emission InnEVation

Geo-mapping for Hi-Efficiency Over Spatial Nodes

(The GHOSN Project)

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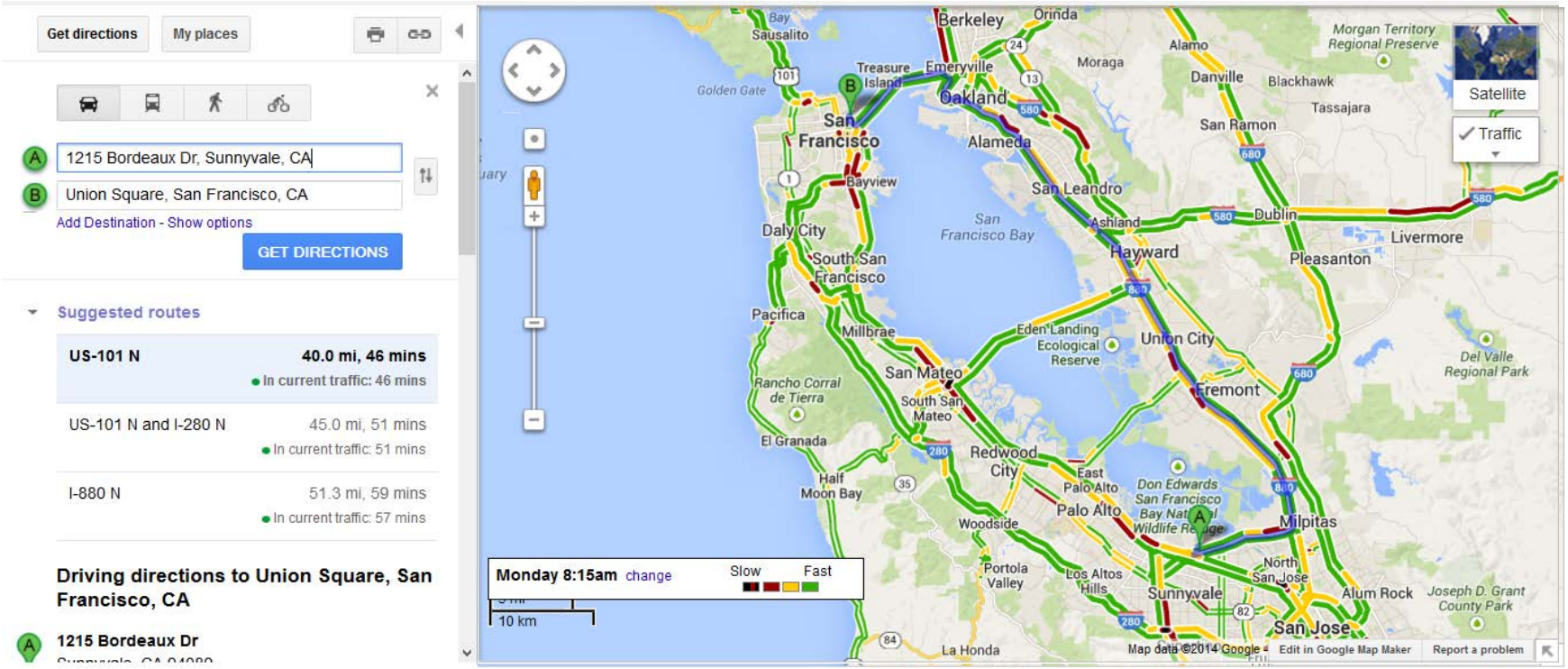
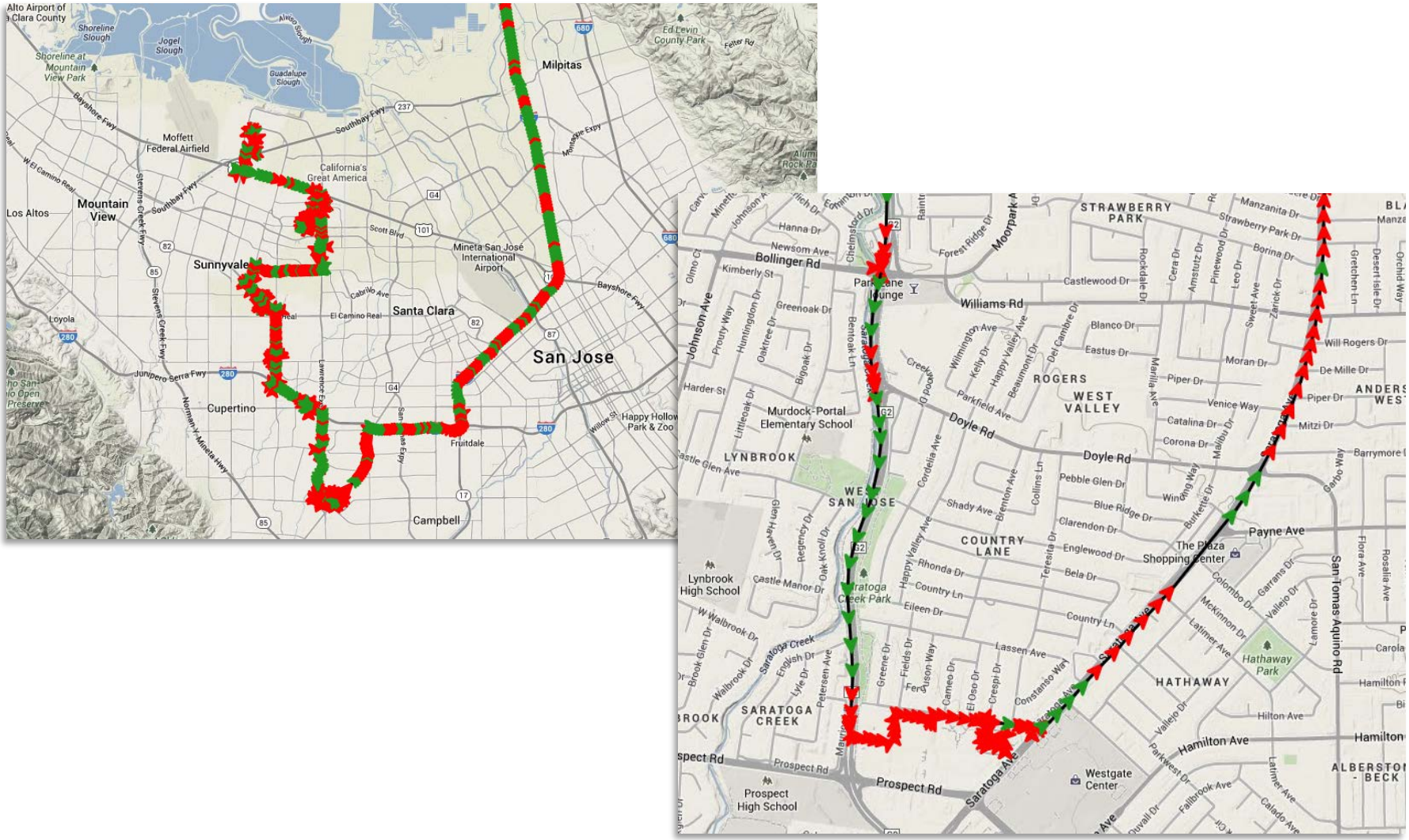
Traffic Based Routing

Shortest, Fastest….



What about most efficient?

Range Optimized Routing



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Relevant Project Topics:

- **Travel Planning**
- **Increase Energy Awareness**
- **Improve Range Confidence**
- **Promote Confident EV Lifestyle**
- **Green House Gas Reduction**
- Total Cost of Ownership
- Prevent/Avoid Charge Rage

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- Commercial viability
  - Crowdsourced – Value Navigation Providers (Waze, Plugshare)
  - Could be gathered and used by individual drivers
  - Applicable to traditional ICE vehicles
- Market Impact
  - Range Confidence, Real World Data (not just projections)
- Societal Impact
  - More efficient routes = range confidence
    = increased EV uptake = GHG reduced = Happy Planet
- User Experience
  - Utilize existing Navigation app
  - No new interface to learn

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- Business Case
  - Of great value to EV drivers
  - Adding efficiency for ICE vehicles as well
  - Aggregated from real world drivers
  - Added value to navigation providers
    - Google, Waze, Garmin, ESRI, Nissan…
- Time to Market
  - Working prototype

Boost / GHOSN

- Range optimized routing.
- Real world crowd sourced data provides confidence
- Complimentary to existing traffic based routing.

- Provides option of “Shortest Route”, “Fastest Route”, “Most Efficient Route”
- Working Demo Online:

http://ghosn.github.io