- GPS tracking system
- Collect position data from other vehicles around host vehicle
- Information system, position and velocity
- GPS/ inertia navigation system combined INS in each unit
- Differences in GPS more accurate for smaller areas
- Differential GPS, combined with INS, possibly paired with mapping
- Relative positioning of two bodies and how fast
- Magnetic mount on roof of vehicle for testing
- Time study, delay from GPS/INS unit, processing delay, communication transmissions
- Navigation units, options/ specifications
- Communication system that is wireless, good in harsh conditions, not interfering with other frequencies.
- Information speed, and which vehicles get certain information at what items.
- Possibly include acceleration in information calculations
- Accuracy decreases with more information (from velocity, to acceleration, to jerk)
- Algorithms
    - Collision algorithm
        - Is collision eminent?
    - Algorithm for collision response
- Alert system
    - Notification if collision is eminent
    - Display – Speaking/ Lights
    - Choose method for reaction to possible collision situation
    - Possible secondary system where vehicle takes over
- Possible use of Wifi system
- 3 Main systems
    - Navigation
    - Communication
        - What data/ how much data should be transmitted
    - Intelligence(Brain) System
        - Collision from specific direction
        - Levels of collision detection system
- Use lights to simulate use of vehicular processes
- Vehicles should each have unique identifier
    - Possible long code number
- Time stamp data packets
- Intersection/ Lane collision
    - Scope of collision
- Noise handling system/ process
- Parts lists/ criteria for selection of parts
    - Processing speed
    - Cost
    - Real time system
    - Probably not Windows OS

    - No LIDAR
- Interface between vehicle units
- Distance between vehicles for need of communication
- Possible use of GIS system
- Demonstration of working product
    - Possible use of WIFI system in units