Critical transportation applications
- Event-driven, Broadcast or Geocast (ROI)
- Leading to trajectory changes
- V2V and V2I communications

NDN advantages
- Better support for mobile, ad-hoc networks
- Vehicular NDN: WiFi broadcast, node as router/relay (consumer and producer)
- Geographic information in naming convention

VSIMRTI
- Integrated network simulations with transportation simulations
- Applications that support changing vehicles’ behavior upon receiving event data
VSimRTI (V2X Simulation Runtime Infrastructure)

Add Nodes Move Nodes Send Message

Receive Message

Change Route Update Position

NS3 (Network Simulator)

VSimRTI patch

NS3 Server (Mobility, Scheduler, Map manager, Wi-Fi installer, ...)

Node Manager

Application

SimpleSendingApp NDNSendingApp

NDN Stack Helper

NS3 Core Mobility Wi-Fi

ndnSIM

Applications Protocol Stack Forwarding Daemon

SUMO (Traffic Simulator)