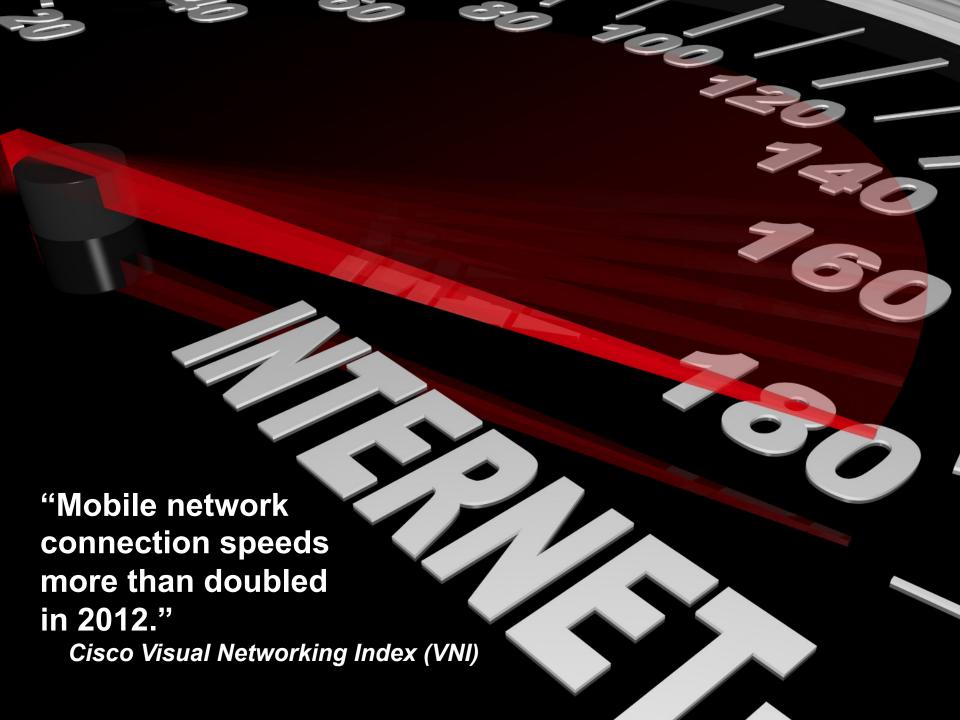
## CARPOOL

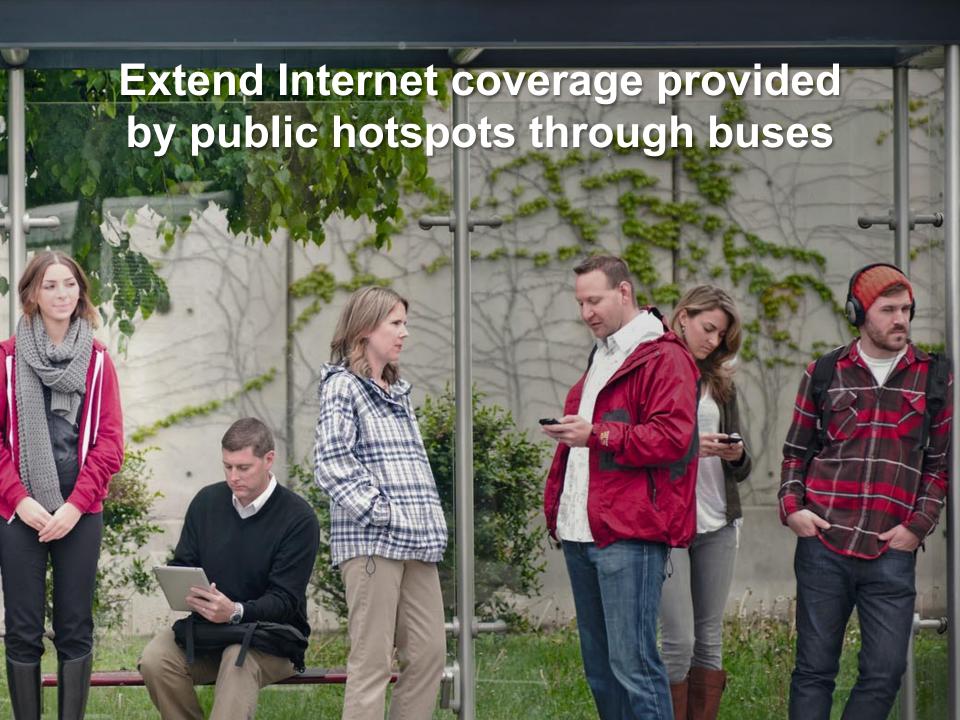
**Connectivity Plan Routing Protocol** 

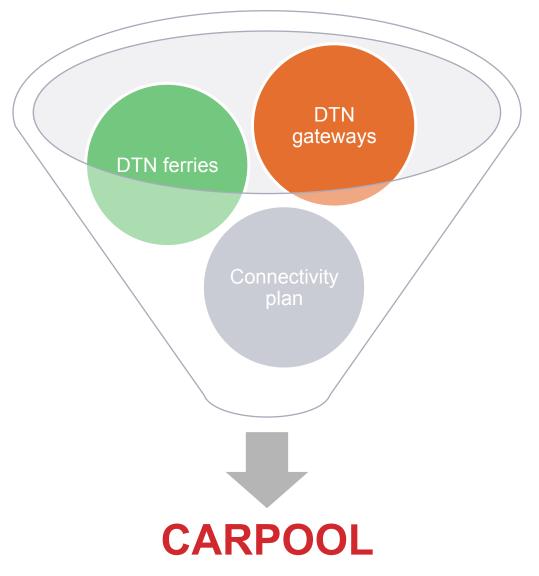
**Ioannis Komnios**Space Internetworking Center





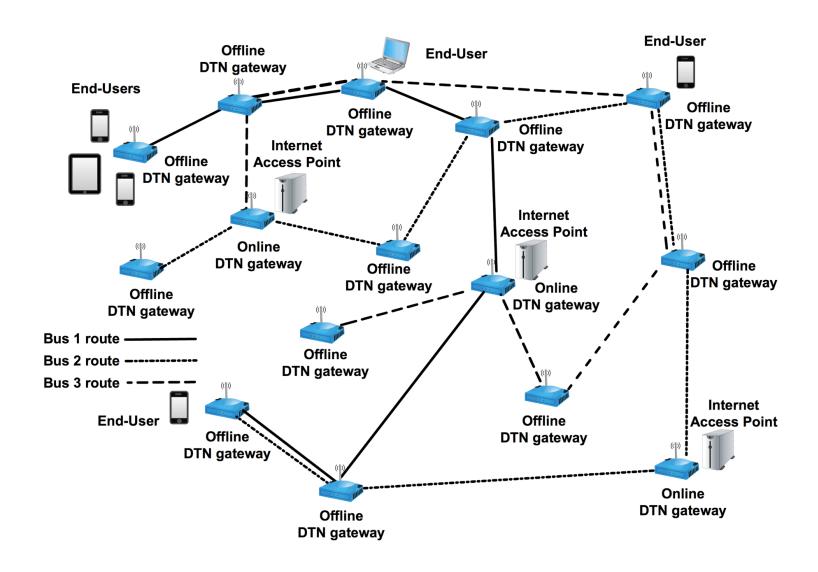






**Connectivity Plan Routing Protocol** 

### Sample Topology



#### **CARPOOL Algorithm**

Identify valid contacts

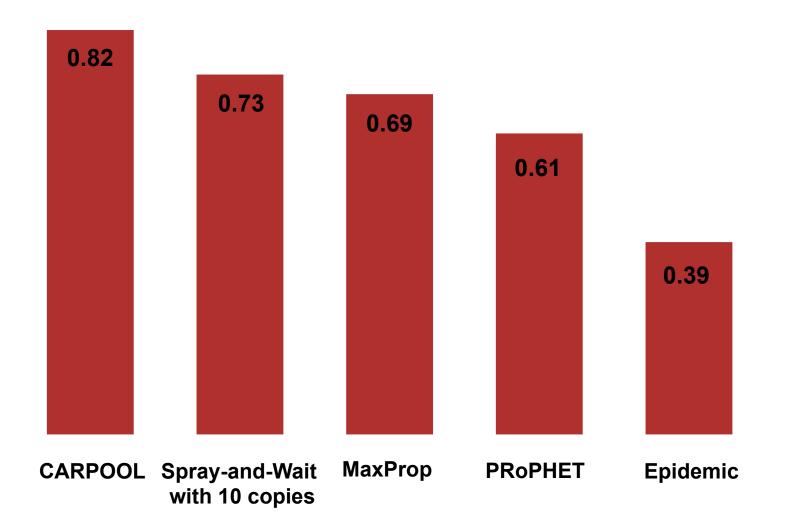
Path found?



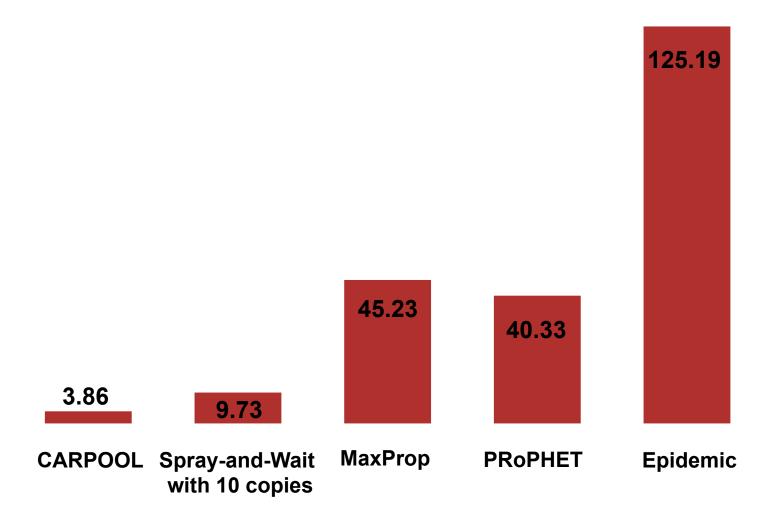
Sort
valid contacts
starting from the
earliest

Connectivity Table Structure [GatewayID, FerryID, ContactTime]

### CARPOOL manages to successfully deliver 82% of the bundles



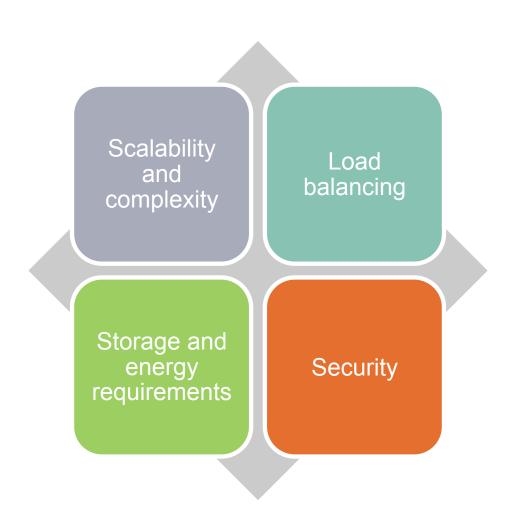
## with minimum overhead even in the worst-case scenario



#### **Enhancements**

Inject 2 replicas of each bundle Exploit contacts between ferries Recalculate delivery time (in ferries) Prioritize small packets

### **Open Issues**



#### Conclusions



# Thank you! Questions?

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