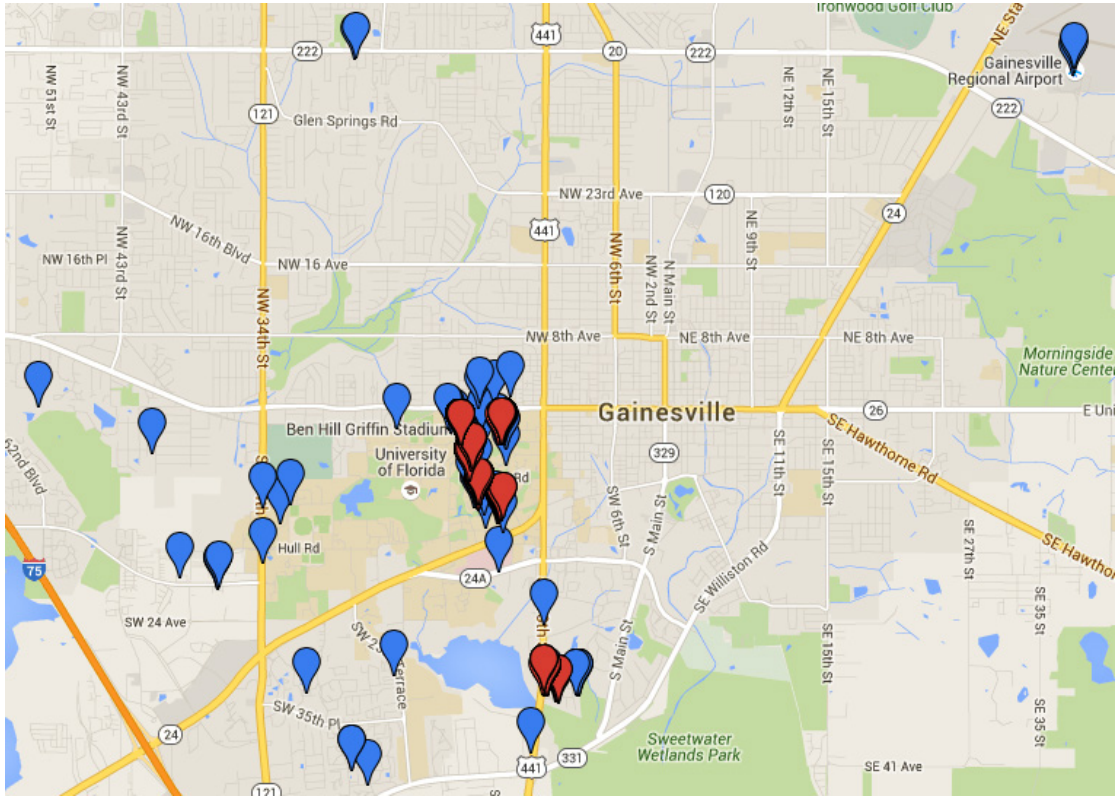
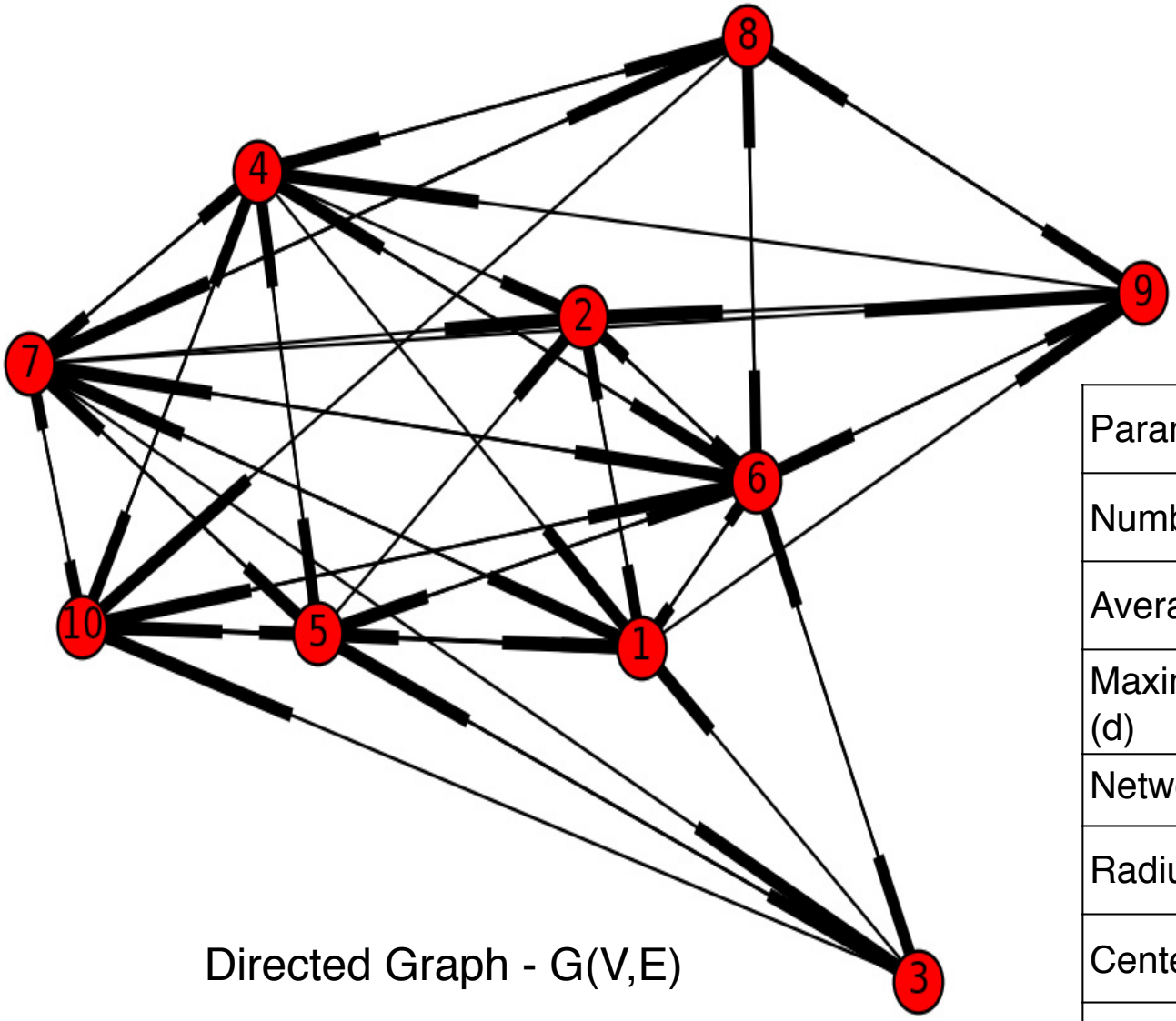
In Vivo Evaluation: Environment



Gainesville, FL
Area: 11km x 8km

Parameters	**Active**
Number of nodes (n)	10
Duration (days)	7
Total messages created	259
Total messages disseminated (1-hop)	796
Total messages disseminated (>1-hop)	167

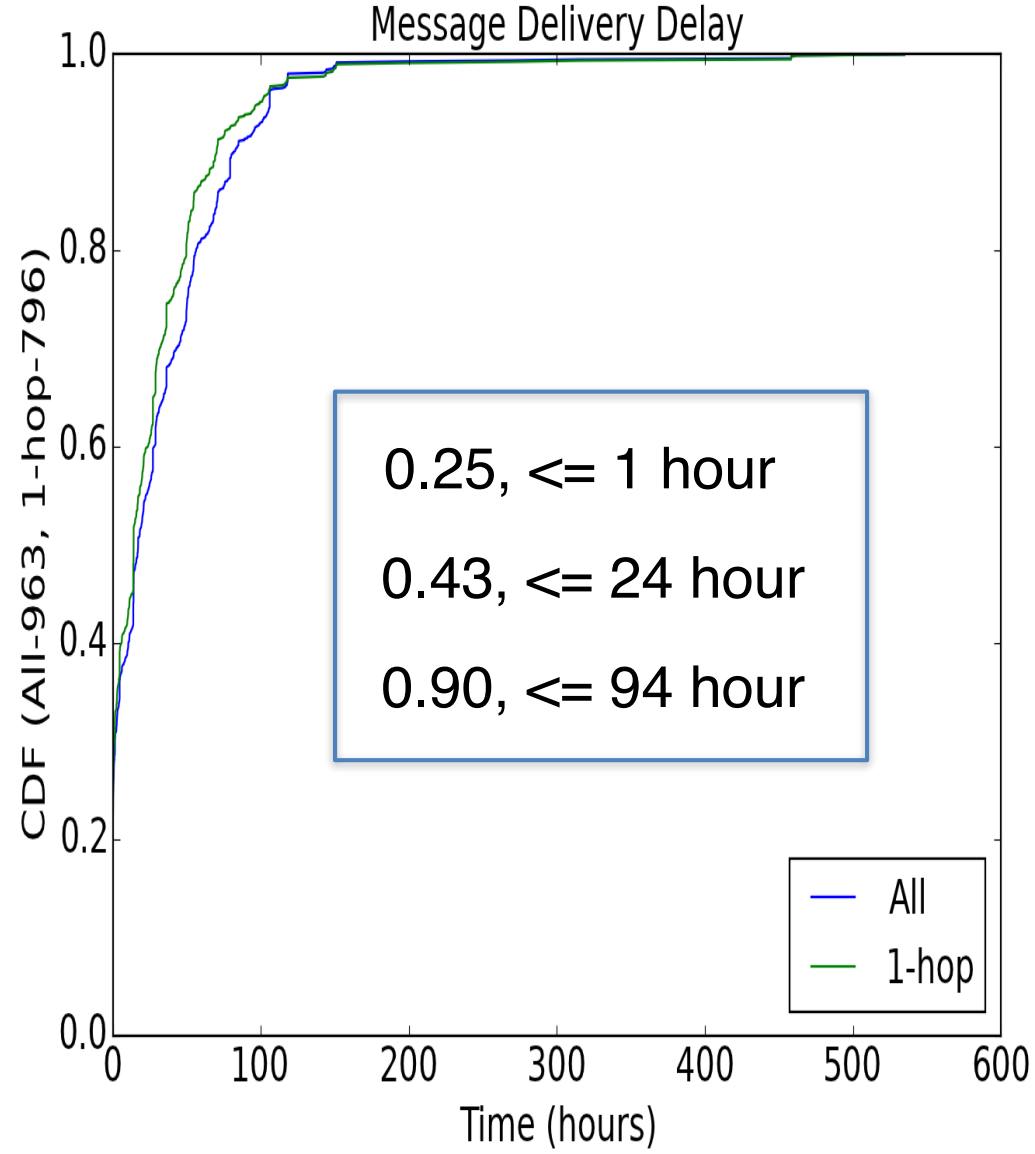
In Vivo Evaluation: Social Relationships

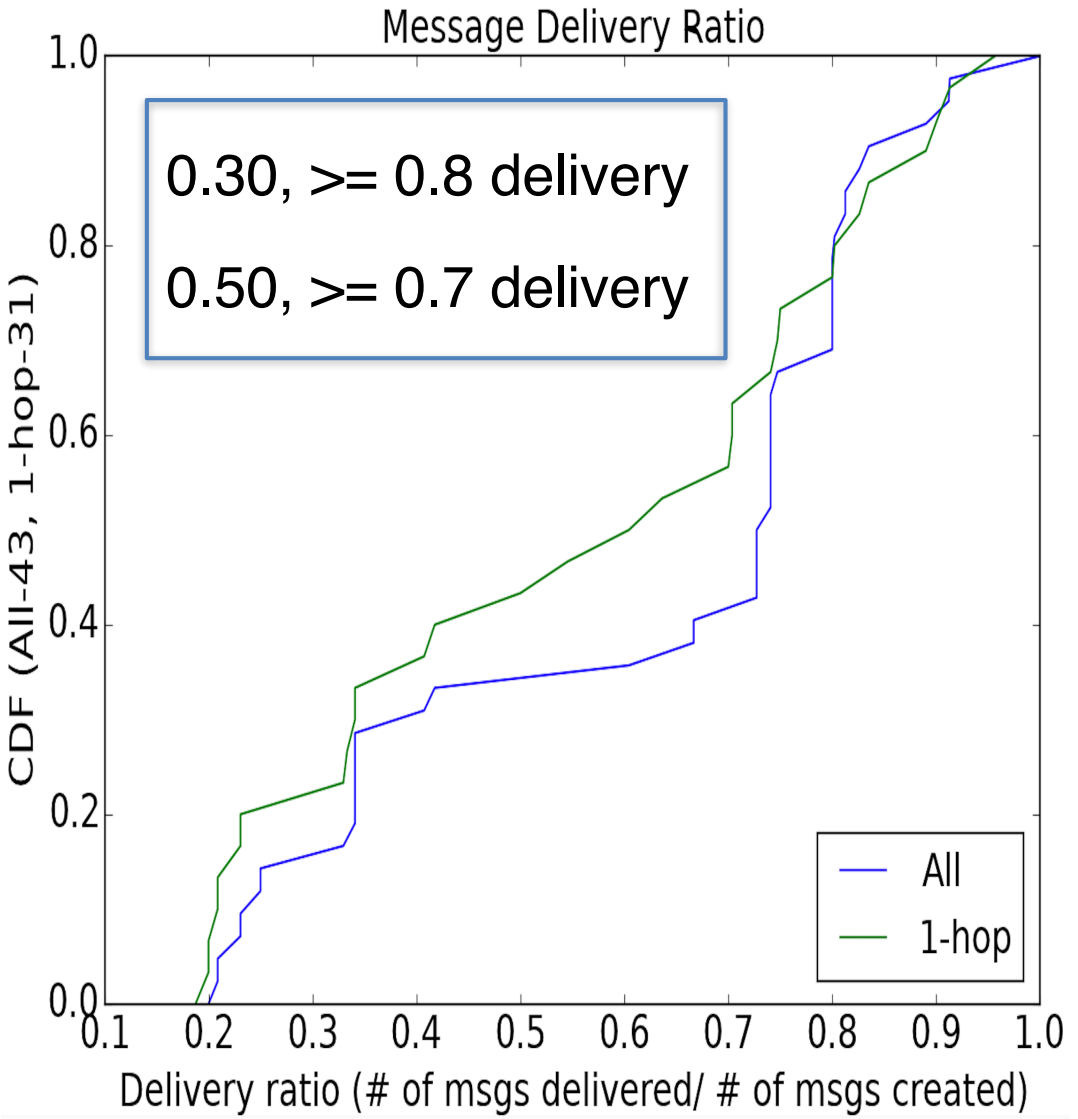


Directed Graph - G(V,E)

Parameters	**Values**
Number of nodes (n)	10
Average shortest path length	1.3
Maximum shortest path length (d)	2
Network density	0.64
Radius	1
Center nodes	6 and 7
Transitivity	0.80

In Vivo Evaluation: Results





Protocols Evaluated in Simulation

Protocol	**Nodes**	***Transmission Range***	***Area***
Interest based routing (Baker et al. 2017)	10	5m - 50m	88km^2
Epidemic routing (Vahdat et al. 2000)	50	25m	.45km^2
PRoPHET (Lindgren et al. 2004)		50m	4.5km^2
		100m	
CAR (Musolesi et al. 2009)		200m	1km^2
SocialCast (Costa et al. 2008)	100		16km^2
CAR (Musolesi et al. 2000)		250m	2km^2

[1] **Baker CE** et. al, “Efficient routing using evolving community structures in mobile delay tolerant social networks” (In-progress)