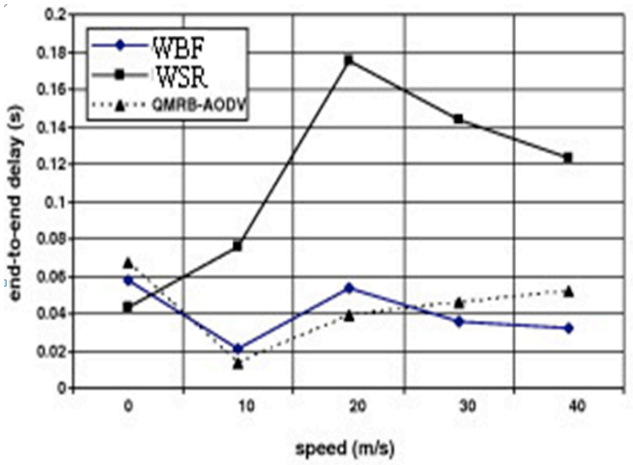
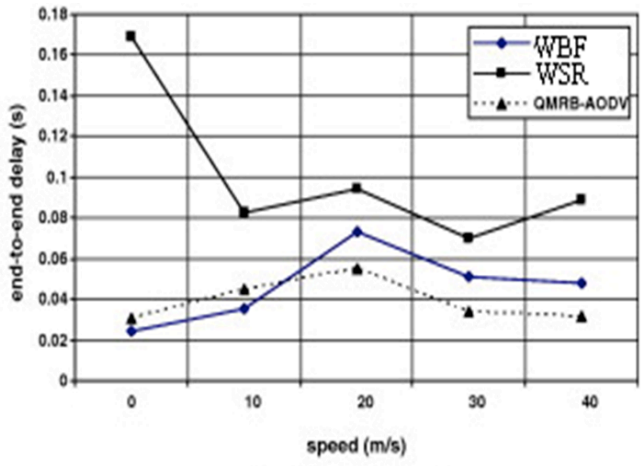



(a) 5 mobile nodes




(b) 10 mobile nodes

Fig 3..,Comparison of WBF and WSR

**Algorithm 1** Algorithm for biasing packets in WBF
ForwardPacket (K)
1: //Consider the bias previously given to the packet
2:m□destination(K)
3:Ø□Temporal(K)
4:R□Spatial(K)
5:(x,y) □TargetLocation(K)
6: //Find the strongest local mapping indicating the whereabouts of the node
7: **for all** mapping j **do**
8: Øi□Lookup(I,m)
9: **if**(Øj>Ø) OR (Øj=Ø AND Ri<R) **then**
10: Ø□Øj
11: R□Rj
12: (x,y) □Centeri
13: **end if**
14: **end for**
15:Temporal(K) □Ø
16:Spatial(K) □R
17:TargetLocation(K) □(x,y)
18: Use a geographic forwarding scheme to send the packet to Target Location(K)
Lookup(j,m)
1:θ □ 0
2: **for all q € {1,2,…..i}do**
3: θ□θ+WBFj[hq(m)]
4: **end for**
5: Return

## IV. Conclusion And Future Work

We present Weak Bloom Filter (WBF) protocol, an unstructured forwarding paradigm based on the partial knowledge about the node locations. The nodes periodically announce their locations on random directions. The nodes use these announcements to create aggregated SetofIDs-to-GeoRegion mappings. A routing state consists of a weak Bloom filter (WBF) that contains a set of nodes and a geographical region where the nodes are believed to be located. WBF also yields the confidence that a node is an element of SetofIDs. When a node has a data packet, the packet is sent in a random direction with the belief that an intermediate node will give the packet a superior hint about the location of the destination node. The packet trajectory is then biased toward the center of the region indicated by this state value While we have considered WSR in the context of large, mobile, and connected ad hoc networks in this paper, we believe the weak state concept can be also adopted in networks that experience node disconnectedness, i.e., delay-tolerant networks (DTNs), though this would require different methods for state dissemination and packet forwarding. Our future plans include the investigation of such methods

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