Vulnerability Coverage

vulnerability		protected by		
type	#	BrowserShield	HTTP filter	antivirus
HTML, script, ActiveX	12	12	0	0
HTTP	3	2*	3*	0
images and other files	4	0	0	4

* 2 HTTP vulnerabilities required BrowserShield and HTTP filter because bad HTTP requests could be generated in scripts or come over network
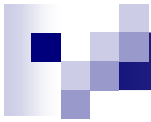
Performance

- Tested with 70 URLs from sample of 250 of top 1 million URLs in MSN Search weighted by click count
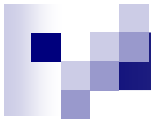
- Other 180 URLs failed to be rendered correctly
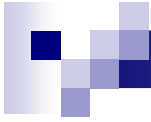
Firewall Performance

- 10 IE processes each loading a page every 5 seconds
- 22% increase in CPU usage
- 18.1% decrease in throughput
- Negligible increase in memory usage

Client Performance

- Microbenchmarks measured overhead of individual JavaScript operations
- Macrobenchmarks measured overall client experience

Microbenchmarks

|	operation	slowdown
1	i++	1.00
2	a = b + c	1.00
3	if	1.07
4	string concat ('+')	1.00
5	string concat ('concat')	61.9
6	string split ('split')	21.9
7	no-op function call	44.8
8	x.a = b (property write)	342
9	eval of minimal syntactic structure	47.3
10	eval of moderate syntactic structure, minimal computation	136
11	eval of moderate syntactic structure, significant computation	1.34
12	image swap	1.07

Macrobenchmarks – Latency
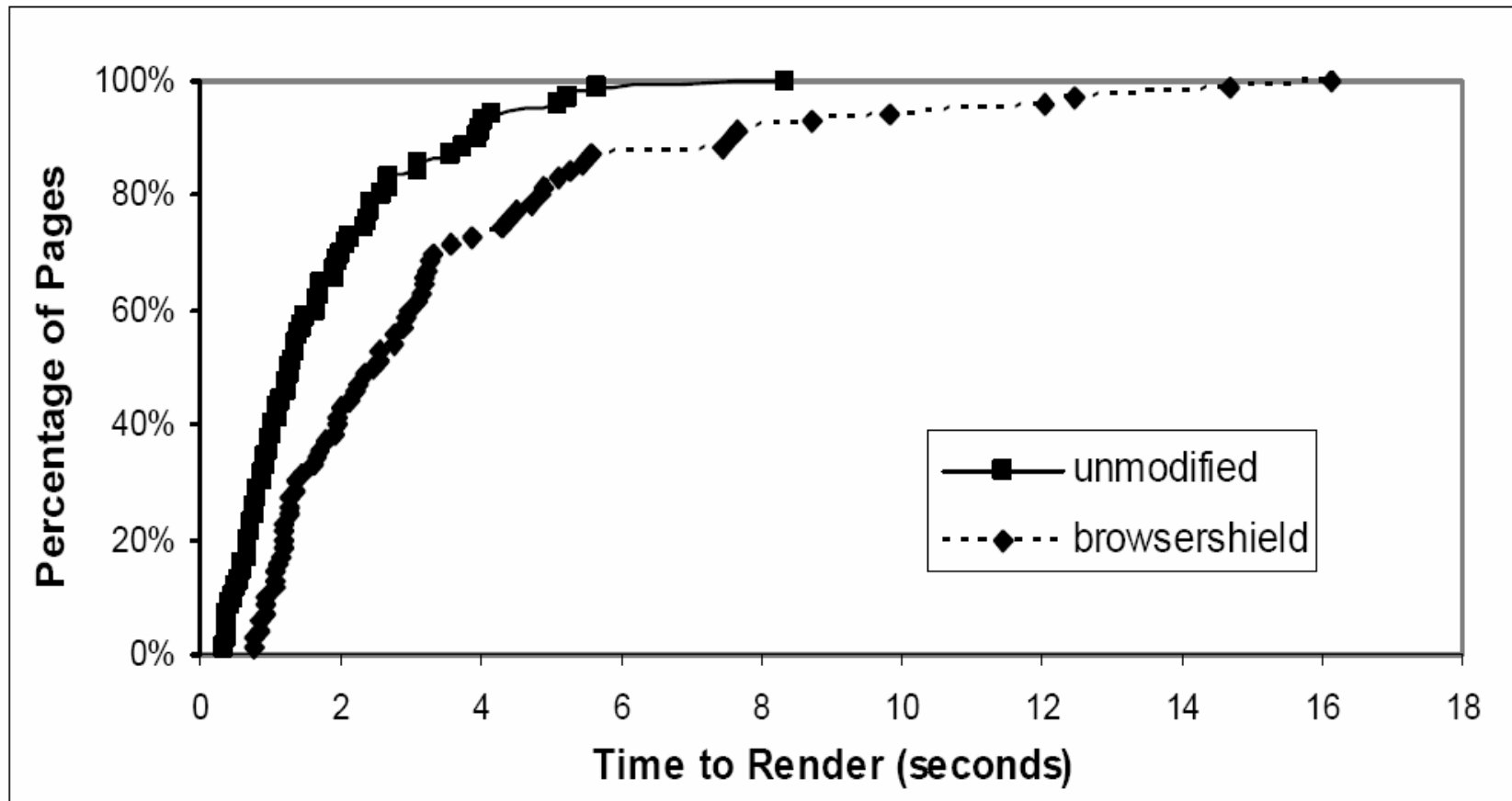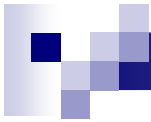
Macrobenchmarks – Latency
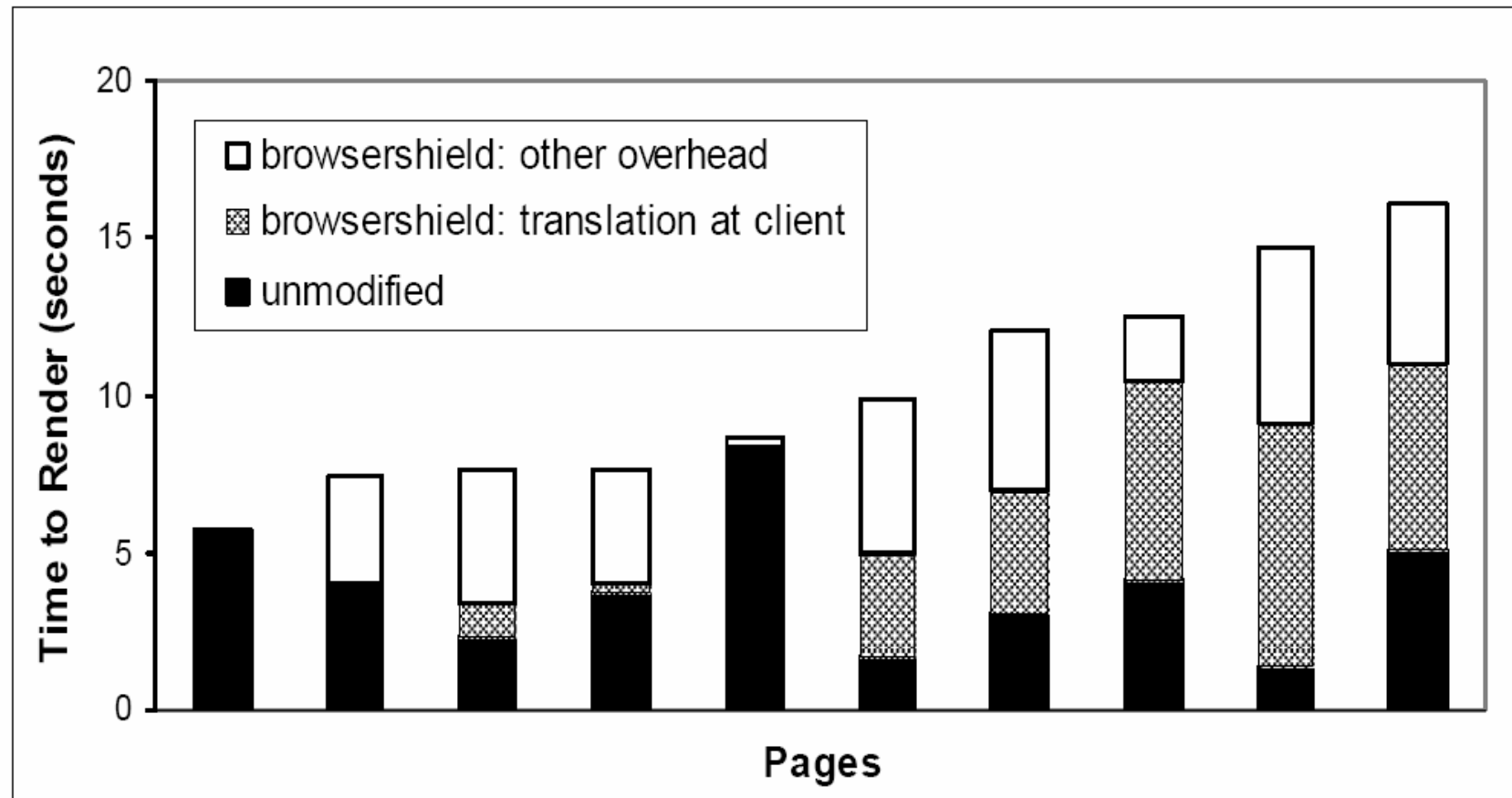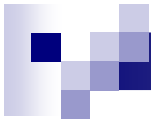
Macrobenchmarks – Memory
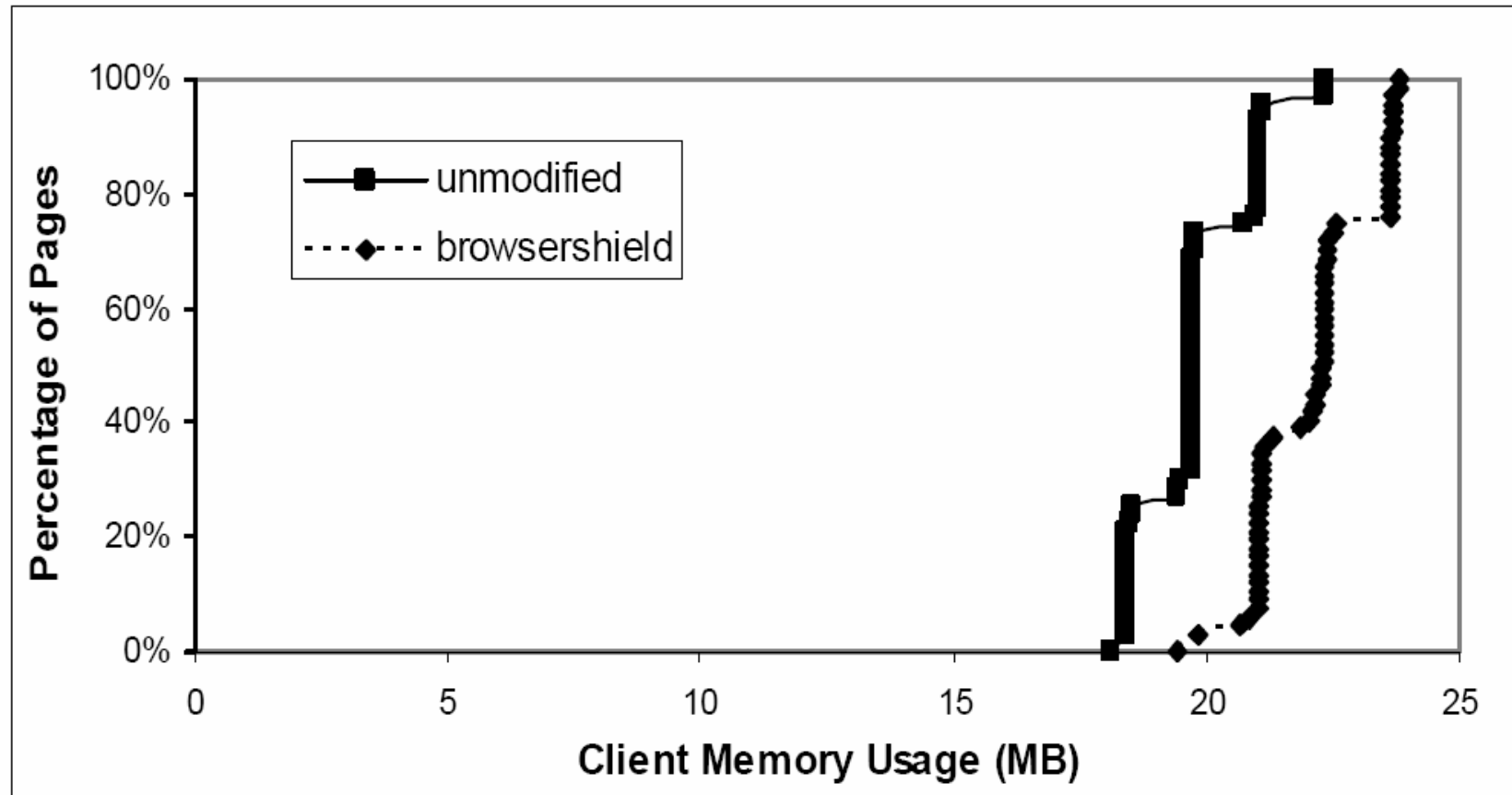
Flaws

- Does not work with 70% of web sites
- Does it work with browsers other than IE?
- Can only detect known vulnerabilities with existing patches – limited window of usefulness