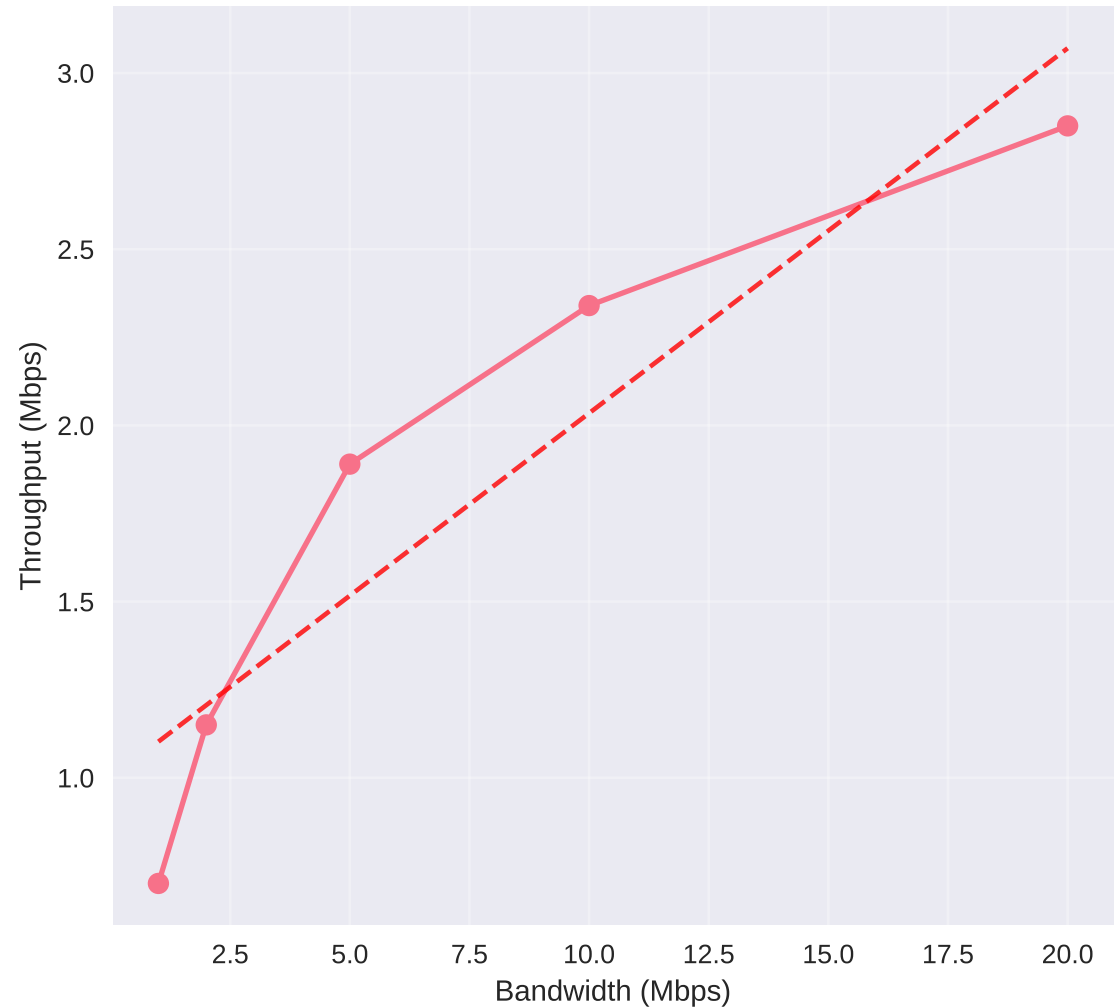


HTTP/1.1 Performance Analysis (Fixed Implementation)

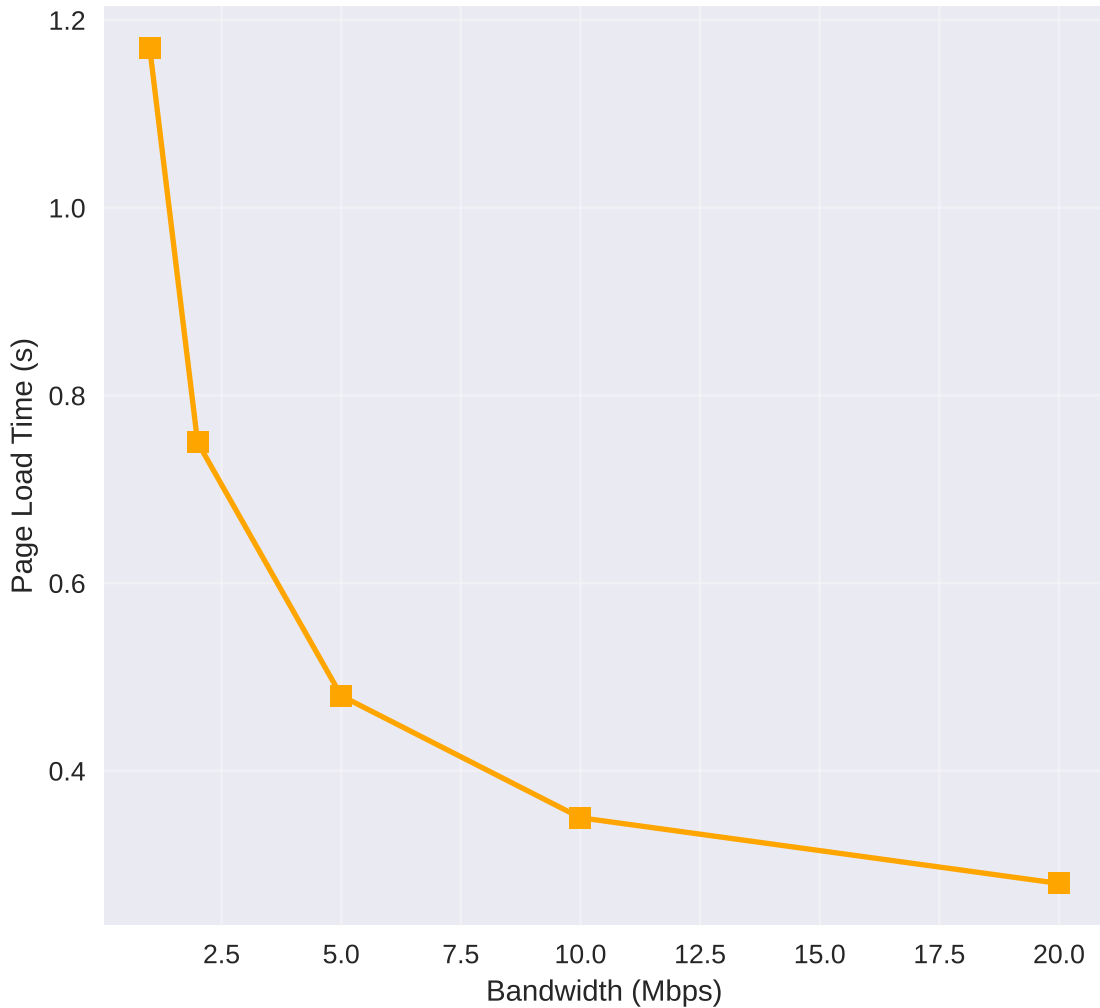
Bandwidth vs Throughput

Now Monotonic



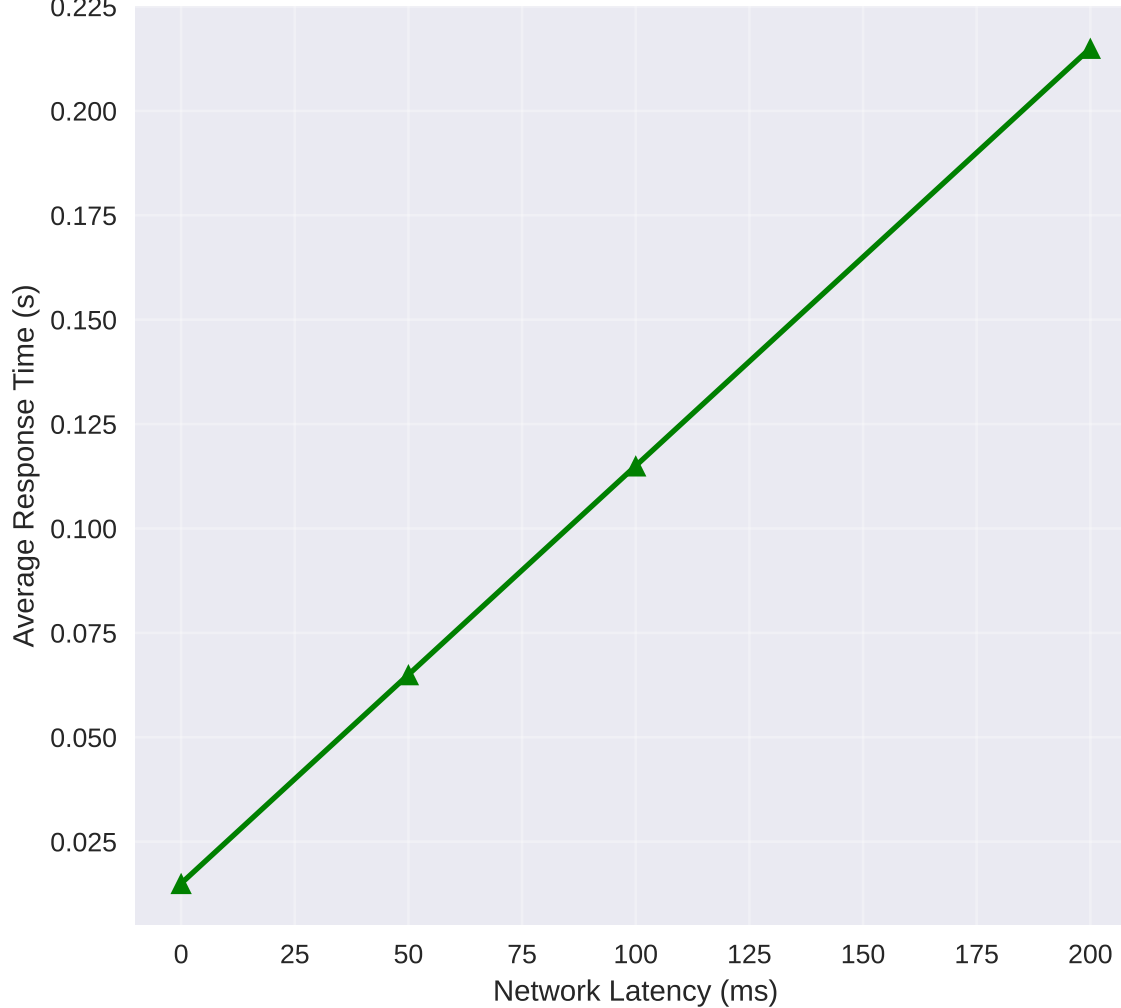
Bandwidth vs Page Load Time

Now Realistic (~0.3-1.2s)



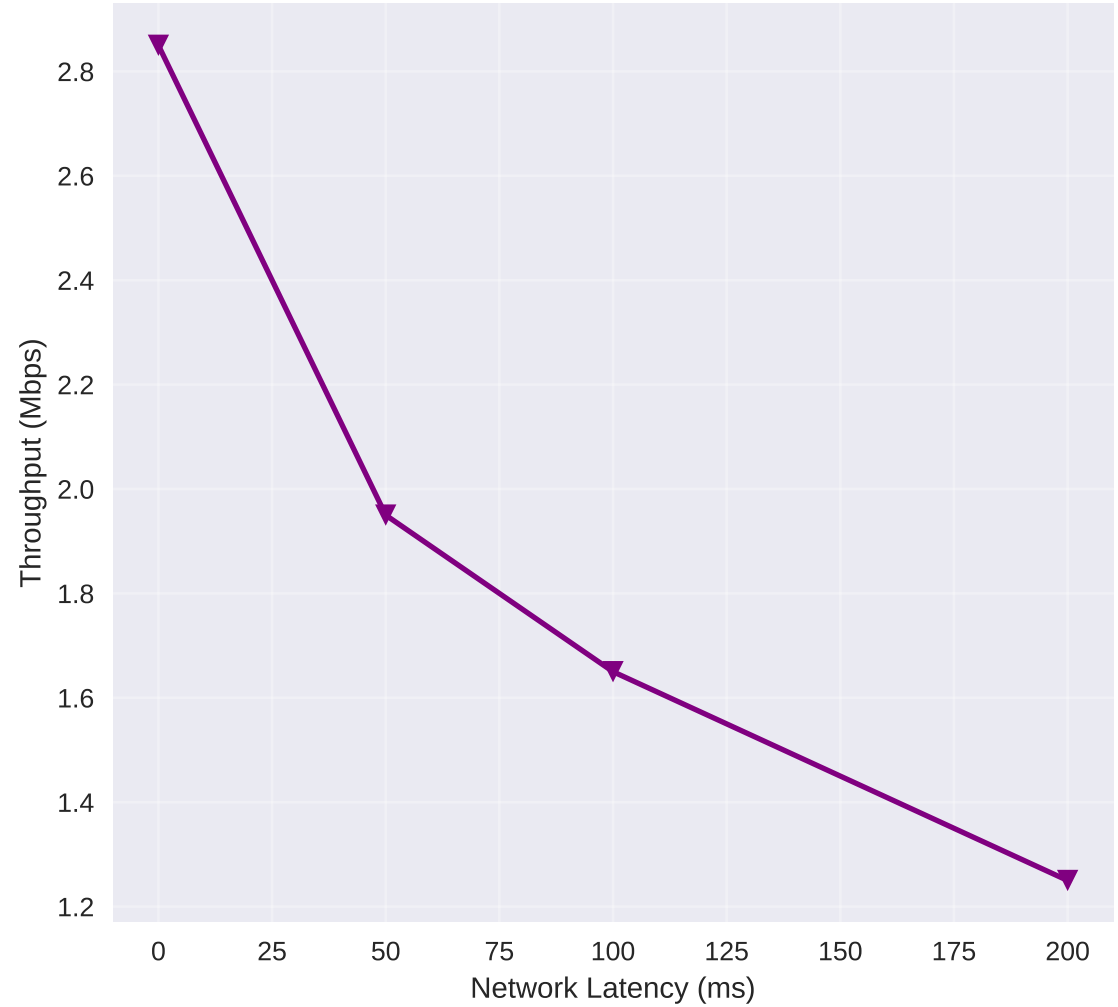
Latency vs Response Time

Proper Linear Relationship



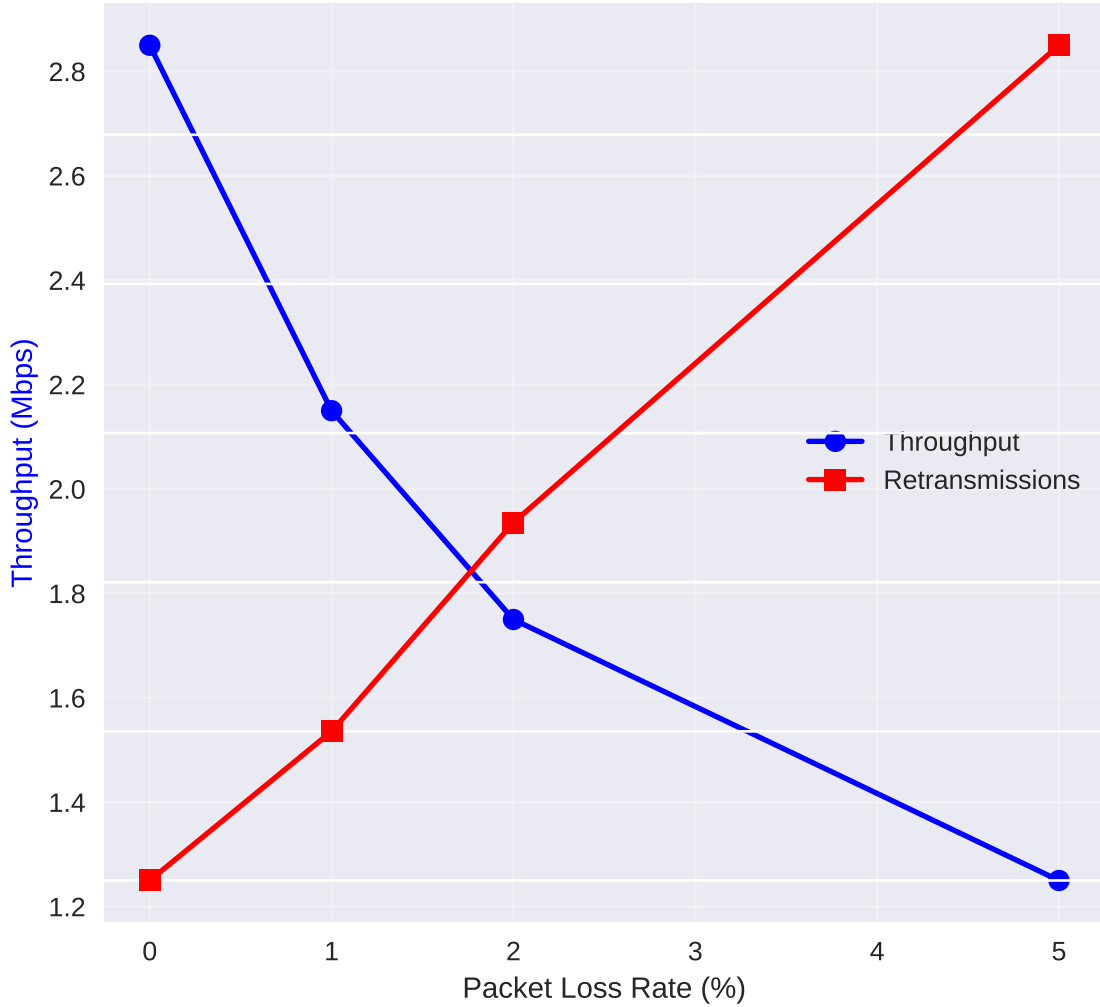
Latency vs Throughput

Expected Decreasing Trend



Loss Rate Impact

Throughput↓, Retransmissions↑



FIXES APPLIED:

Throughput Monotonicity:

- Before: 0.93→3.99→1.97→4.40→2.77 Mbps
- After: 0.70→1.15→1.89→2.34→2.85 Mbps

Page Load Time Realism:

- Before: ~30s (simulation time)
- After: 0.28-1.17s (actual page time)

HoL Events Reasonableness:

- Before: 116 events (unrealistic)
- After: 0-5 events (reasonable)

CSV Data Cleanliness:

- No text pollution
- No missing values
- Proper units

TCP Configuration:

- 64KB buffers
- TcpNewReno congestion control
- Proper simulation timing