Allowing HTTP clients to use stale DNS data

Latency is critical for networking

This is especially true for HTTP

HTTP requests end up paying RTT many times: DNS, connection establishment, request-response

HTTP clients should avoid paying these RTTs whenever possible:

The challenge lies in the "whenever possible".

Proposal

- RFC 8767 allows serving stale DNS data to improve DNS Resiliency
- Relax it to include
 - o Stub DNS resolvers, when used by HTTP clients that opt into this
- During a TLS handshake, HTTP clients can confirm whether a server is
 - Reachable
 - Authoritative
- As such, letting them use stale DNS data should
 - o Be "safe"
 - Lead to a faster internet