# HTTP in 2019 From 1.0 to 3+ Conventional Wisdom Checkin

Is There a Consensus View?

The Question: Do we have a shared understanding of what the current HTTP problem space consists of? (Even if we don't have a shared viewed of the solution space.)

Both YES and NO are interesting outcomes.

#### **CAUTION: MANY ASSERTIONS WITHIN**

Testing those assertions is the point of this presentation

#### **Category One**

#### **Significant Wins**

The Happy Stuff aka Mission Accomplished

# **H2 Multiplexing**

#### TCP Initial Window >3

#### **RST-STREAM**

# Interop

#### **More HTTPS**

#### **More Forward Secrecy**

#### **Category Two**

### We're Working On It

The Future Looks Bright We Think We're Pointed the Right Way

#### **TCP Head of Line Blocking**

#### **TLS Head of Line Blocking**

#### **Header Compression**

#### **Zero Latency Restart**

## Initial Window and Connection Management

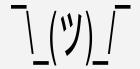
## Splitting Semantics and Transport

#### **Category Three**

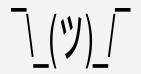
Important but \( \bar{\} \( \mathcal{'} \) \( \bar{\} \) ...

Path is unclear but there are competing ideas

# **Priority**



#### **Push**



#### **Bi Directional**

#### **Cross Stream Compression**

# Routing: {Alt-Svc, ORIGIN, Secondary Certs, ESNI}

# Negotiation: Languages, Formats, Client Hints



#### **Disconnected Cases**

#### **Tunnels**

# Defined Behavior vs Degrees of Implementation Choice

#### **Category Four**

#### Important, But We Have <del>No</del> Limited Ideas

Sad

# **Tracking**

### **Device Management**

#### **Traffic Analysis**

# **DISCUSS**