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October 1, 2009

Via Electronic Delivery

Ms. Marlene H. Dortch
Federal Communications Commission
The Portals, TW-A325
445 12th Street SW
Washington, DC 20554

Re: Notice of *Ex Parte* Presentation – GN Docket 09-51,
A National Broadband Plan for Our Future

Dear Ms. Dortch:

In accordance with Section 1.1206(b) of the Commission's rules, we hereby provide notice that on Wednesday, September 30, 2009, Rick Whitt, Washington Telecom and Media Counsel, Google Inc., and Donna N. Lampert and the undersigned, of Lampert, O'Connor & Johnston, P.C., met with Blair Levin, Executive Director of the Commission's Omnibus Broadband Initiative ("OBI"), Dr. Carlos Kirjner, Senior Advisor to the Chairman on Broadband, and OBI/National Broadband Task Force members Kristen Kane, National Purposes Director, Phil Bellaria, Director, Scenario Planning, Rob Curtis, Deployment Director, and John S. Leibovitz, Deputy Chief, Wireless Telecommunication Bureau.

We distributed and discussed the attached document, *Evolving a National Broadband Plan*, and issues related to the National Broadband Plan highlighted in that document.

Please do not hesitate to contact me directly with any questions.

Respectfully submitted,

E. Ashton Johnston
Counsel for Google Inc.

cc: *(via electronic mail)*
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Evolving a National Broadband Plan

Rick Whitt
Washington Telecom
and Media Counsel

September 2009

Background on the NPB

By February 17, 2010, the FCC is required to submit to the Senate Commerce Committee and the House Commerce Committee "a report containing a national broadband plan."

"The national broadband plan … shall seek to ensure that all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal."

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Regulatory Challenges

Congress' mandate for the FCC to provide a plan to establish national broadband capability and to determine benchmarks is made more challenging by various impediments.

- Rapidly-changing markets and technologies.
- Economics of communications infrastructure.
- Lack of timely, relevant, and objective broadband deployment and adoption data.
- Shortage of time to develop and adopt a plan.

Suggested Approach

In order to assist the FCC in accomplishing its Congressional mandate, we propose adopting a data-driven, iterative, evolving policy process.

Under such a process, the Commission can accurately assess the market conditions, oversee implementation of tailored projects and programs, and evaluate their real-world impact on an on-going basis.

This is in contrast to adopting a one-time blueprint that tries to account for all known and unknown variables, and prescribes definitive solutions.

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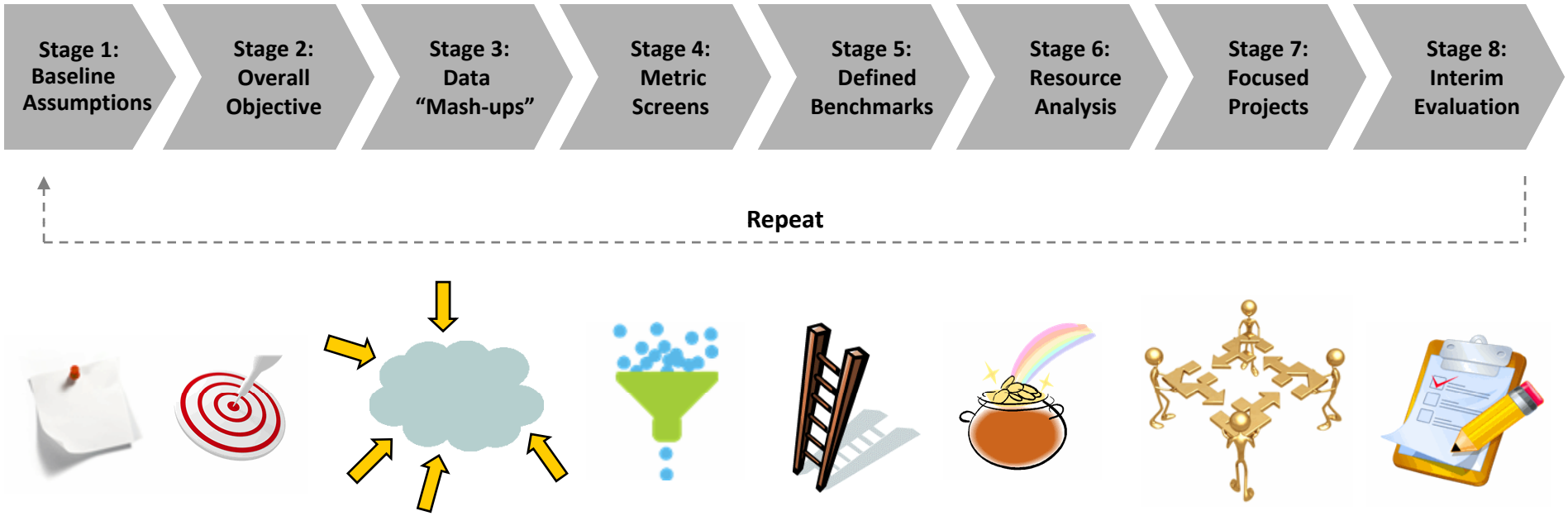
An Evolving National Broadband Plan

The proposed framework is a flexible, comprehensive eight-step process.



We should aim to facilitate an environment that over time stimulates investment and innovation in -- and usage of -- broadband technologies and applications.

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Stage 1: Baseline Assumptions

Acknowledging our initial views about the state of the market

(subject to empirical challenge)

allows the process to begin at a common starting point.

Baseline Assumptions

Broadband is a good thing.

- Communications infrastructure plays a central role in our society.
- Broadband enables high-speed access to the Internet and other online resources, and the resulting positive spillovers.
- There are numerous trans-sectoral benefits: health, education, energy, environment, democracy, free speech.

The economics of infrastructure suggest an important government role in facilitating broadband deployment and uptake.

- Broadband infrastructure involves high up-front costs, network effects, spillovers, and reliance on public resources and inputs.
- Resources, both public and private sector, are finite.
- The private market by itself may not lead to optimal broadband deployment, service innovation, and consumer uptake.
- The government's appropriate aim is to assist or complement the private market where necessary, but not to supplant it.

Solutions should be tailored, flexible, and adaptive.

- While broadband is a national policy matter, a mix of federal, regional, state, and local fora, employing a variety of private and public solutions, may be optimal for different circumstances.

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Stage 2: Overall Objective: Optimal Net Platforms

The overall objective of the National Broadband Plan should be to broaden the deployment and utilization of broadband infrastructure as an optimal Internet platform for all Americans.

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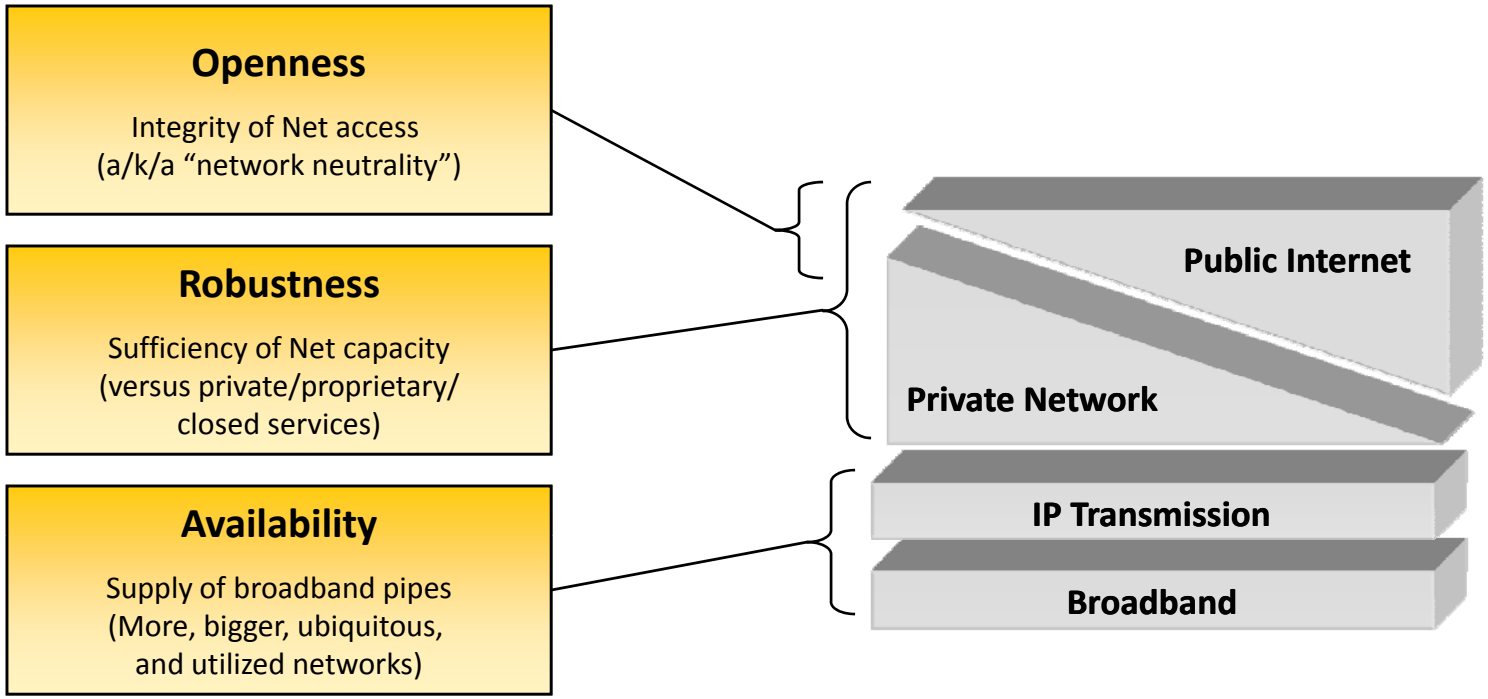
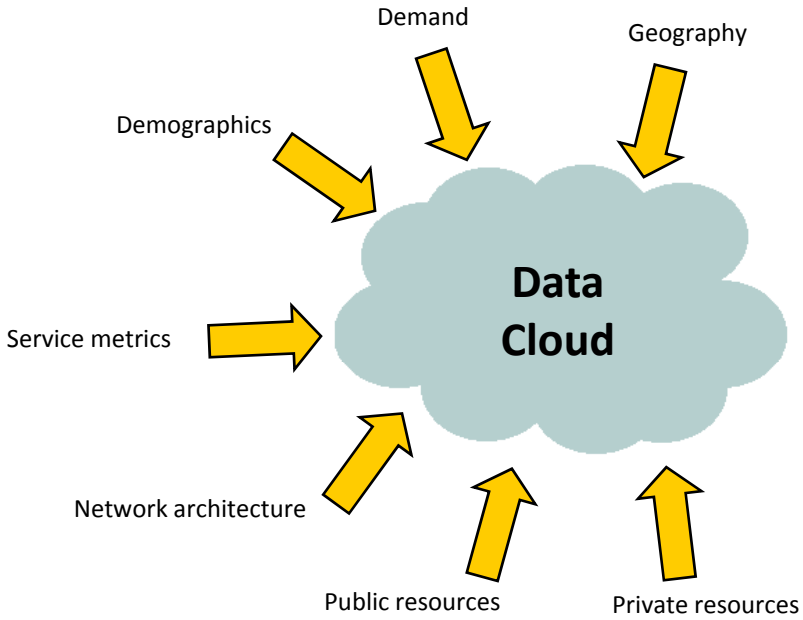
Stage 2: Overall Objective: Multiple Dimensions

The FCC should be most concerned with adopting policies pertaining to broadband infrastructure as an optimal platform for Net-based activities. In doing so, the Commission should assess the various dimensions of broadband. One approach is to utilize these three supply-side factors:



Stage 3: Data "Mash-Up"

Various data sets are collected from a range of sources in order to begin determining what we know about the U.S. broadband experience across similar geographic locations and socio-economic scenarios and to determine what additional information is needed.



Comprehensive data from multiple sources

- **FCC** (Form 477, USF data, spectrum inventory, other data collections)
- **NTIA** (Broadband inventory map, spectrum inventory)
- **Other Federal Government** (Census Bureau, USDA, BEA, BLS, NEC)
- **State and Local Governments** (broadband maps, surveys)
- **Private Sector** (Measurement Lab)
- **International** (OECD, Foreign country national plans)

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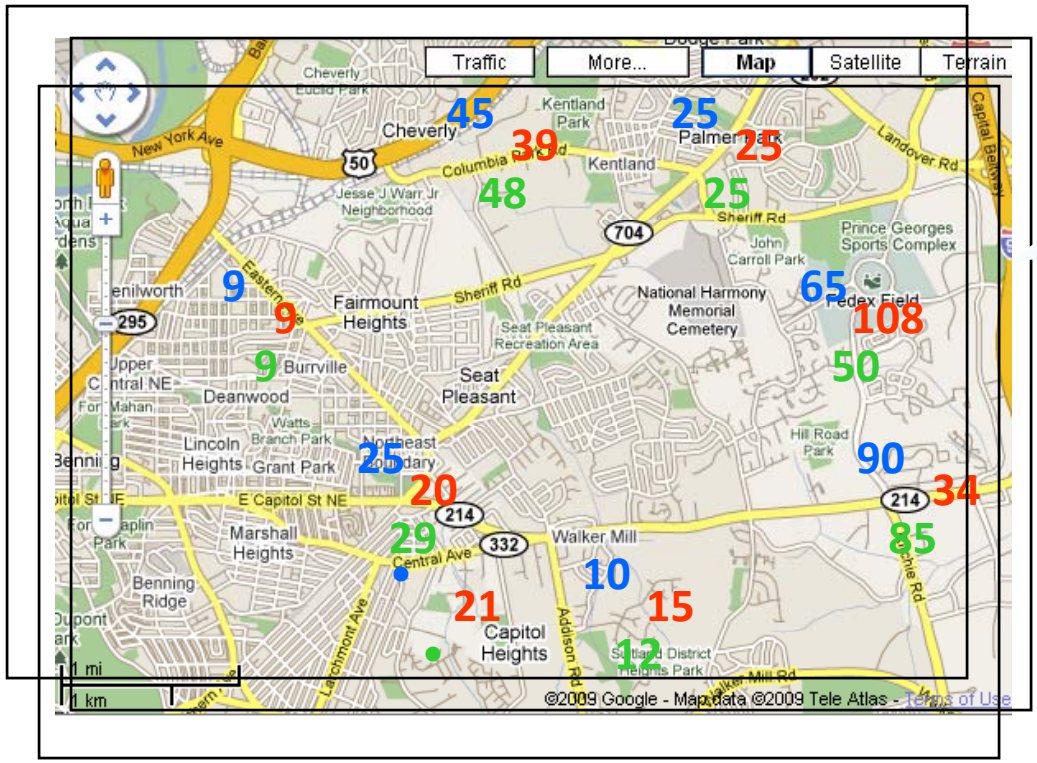
Stage 3: Data "Mash-Up" (2)

Various data sets are overlaid geographically and temporally in order to map our current knowledge base and begin an analysis of market conditions and needs.

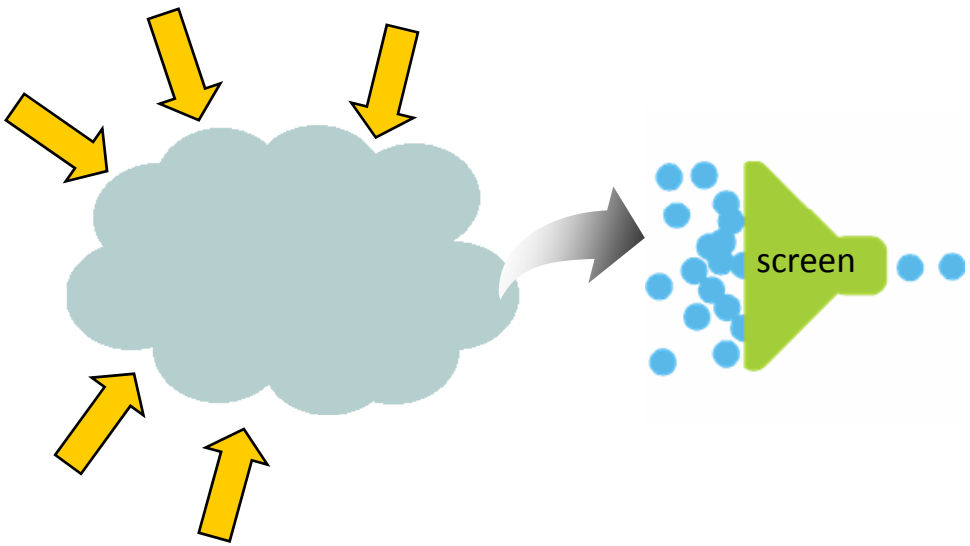


Various data sets as the process develops over time (*e.g.*, different years, different sources).

NB: view this slide in "slide show" format in order to see animation.

Stage 4: Metric Screens

Compiled data is then put through selected filters to identify key broadband metrics.



Key Screens & Metrics

- **Availability (supply)**
  - Bandwidth (advertised, averaged, peak)
  - Mobility (reach beyond the home)
  - Competition (number of suppliers)
  - Ubiquity (covered population)
- **Robustness (supply)**
- **Openness (supply)**
- **Uptake (demand)**
  - Affordability (prices)
  - Consumer penetration
  - Sector synergies (health, education, energy, e-government, public safety, etc.)

Stage 5: Defined Benchmarks

Congress requires the FCC to establish benchmarks to meet the goal of ensuring that all Americans have access to broadband capability.

The Commission should set forth certain bold yet attainable benchmarks to help focus attention on those market dimensions that may require particular work.

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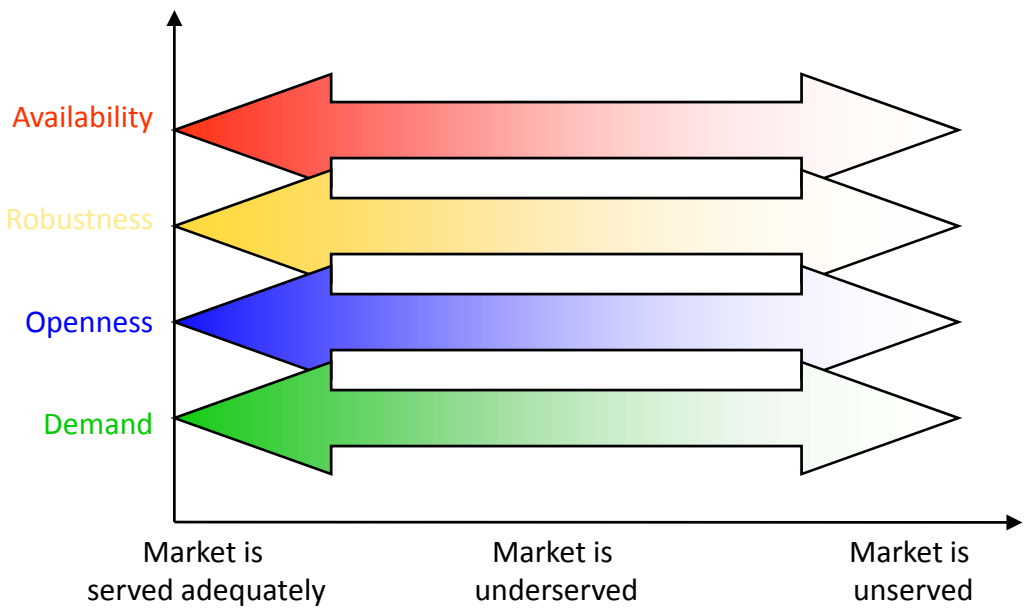
Stage 5: Defined Benchmarks (2)

The gaps between selected benchmarks and filtered data results constitute the suboptimal market dimensions that will help identify tailored projects.

Dimensions



Benchmarks

Availability

- Ubiquity (ex. 5x5 goal)
- Speed (ex. 1Gig test bed proposal)

Robustness

- Substantial portion of capacity available for Net access (*ex*: 20 Mbps) vs. overall broadband capacity

Openness

- No blocking, degrading, or prioritizing

Demand

- Penetration (ex: bb take rate = wireline/wireless phone take rate)
- Affordability (ex: 100 MG for FttL)

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Stage 6: Resources Analysis

Determine what is currently available in public and private sectors to "move the needle" on critical dimensions of broadband service.

After identifying market "gaps," the FCC should review all available and potential resources.

Private: Debt and equity capital markets; current and planned investments by incumbents and others to deploy broadband infrastructure.

Public: Recovery Act grants and loans, other federal appropriations, USF, tax and other investment incentives, spectrum (licensed, unlicensed, government), etc.

Legislative and regulatory (by jurisdiction): locality, municipality, county, planning district, state, regional, federal.

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Stage 7: Focused Projects

Depending upon the nature and extent of the market gaps, and the available resources, the selected policy project(s) may be more prescriptive, or more adaptive.

Adaptive ← Project Response Continuum → **Prescriptive**

A more **adaptive approach** explores policy options such as indirect economic incentives and other tools rather than direct regulation of market behavior.

- *E.g.*, provide incentives for multiple home-run fiber deployment
- *E.g.*, provide incentives for efficient spectrum use
- E.g., tie carrier/ISP deregulation to broadband deployment benchmarks

Projects

A more **prescriptive approach** relies upon government mandates and direct intervention in markets due to sizable market gaps.

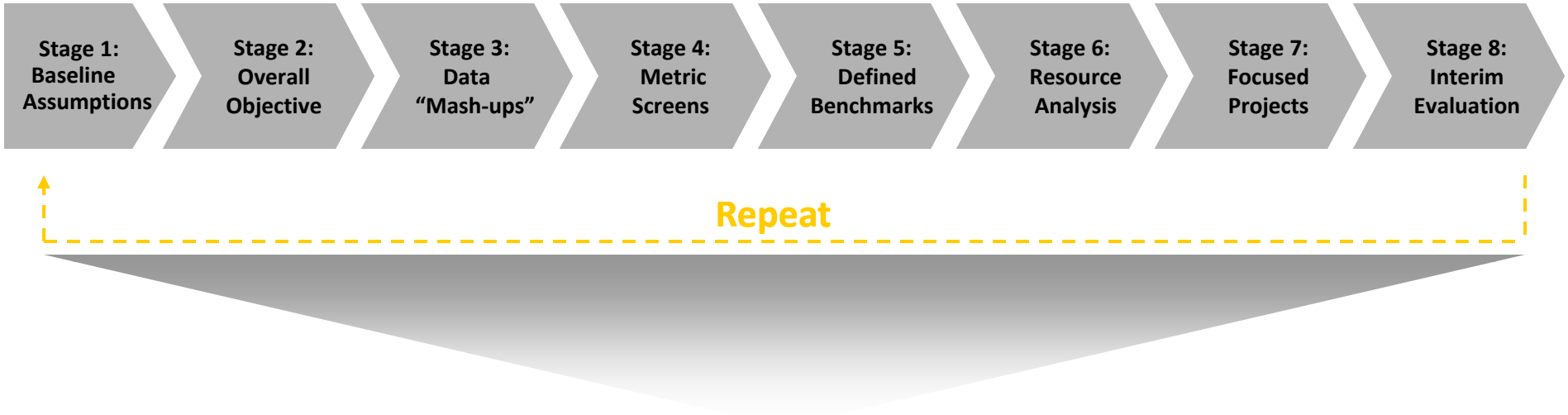
- *E.g.*, USF support for broadband to unserved areas
- *E.g.*, broadband conduit in public works projects
- *E.g.*, spectrum inventories and re-allocations

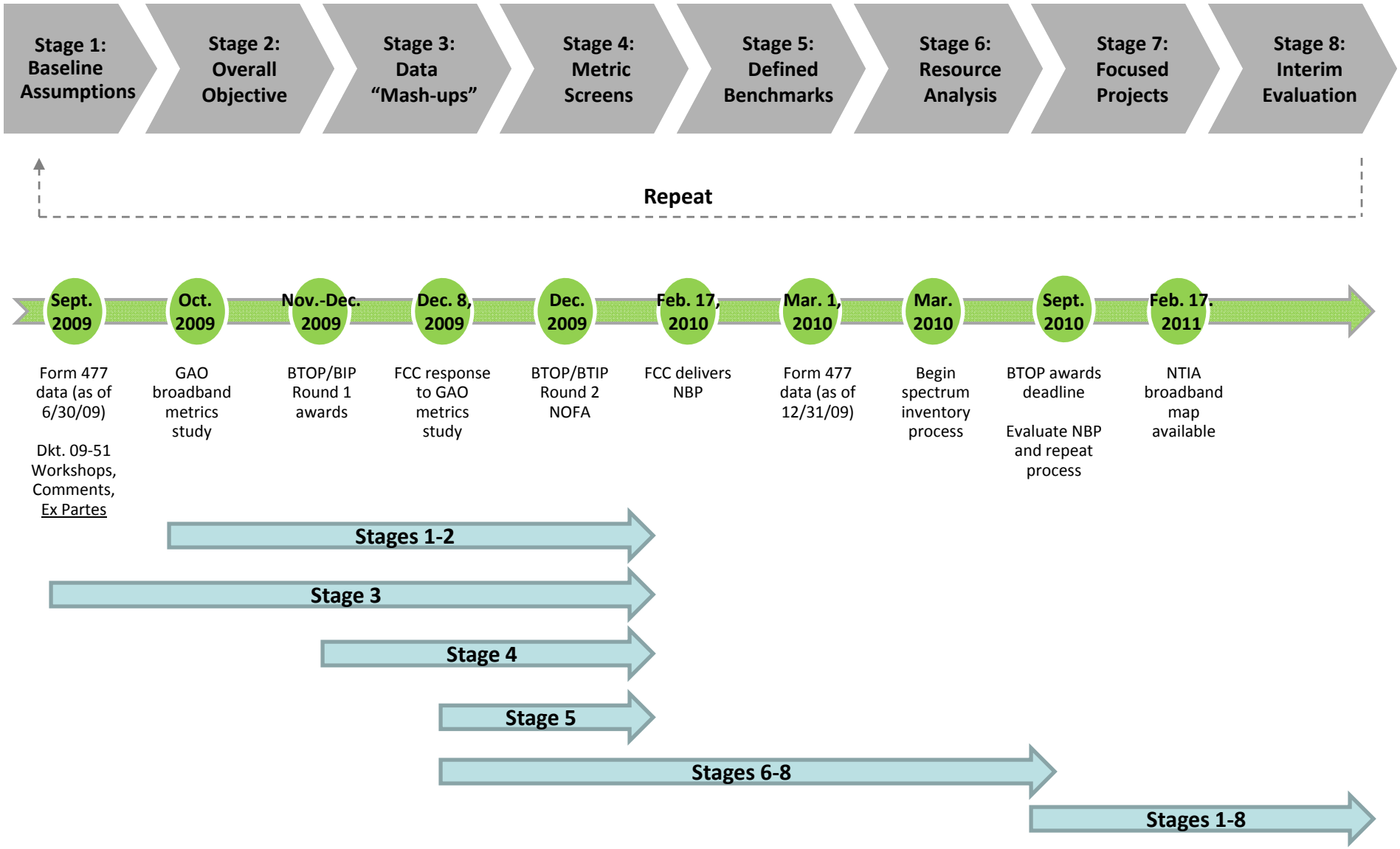
Stage 8: Interim Evaluation

The final step is to critically assess "outcomes" and "outputs" by:

- Gathering new data to determine the efficacy of projects (*e.g.*, study effectiveness of Recovery Act grants/loans) and plug information gaps.
- Assessing deficits and possible improvements in data metrics based on defined goals from earlier in the process.
- Evaluating the status of deployment of broadband service, including progress of projects supported by Recovery Act grants.
- Challenging initial assumptions and seeking new input.

Repeat



The process will have a greater likelihood of achieving the National Broadband Plan's overall objectives if the cycle of data gathering, screening, benchmarking, implementing, and evaluating is continually improved through iteration.

Suggested Timeline