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Mountain View, CA 94043

Google Inc.

Request for Information

Google Fiber for Communities

February 10th 2010



Google Fiber for Communities

Google is planning to launch an experiment that we hope will make Internet access better and faster for everyone. We plan to test ultra-high speed broadband networks in one or more trial locations across the country. Our networks will deliver Internet speeds more than 100 times faster than what most Americans have access to today over 1 gigabit per second, fiber-to-the-home connections. We'll offer service at a competitive price to at least 50,000 and potentially up to 500,000 people.

From now until March 26th, we're asking interested municipalities to provide us with information about their communities through a Request for Information (RFI), which we'll use to determine where to build our network.

Request for information

Google is asking local governments and residents to express their interest in our fiber optic trial and to provide information about their respective communities by completing our request for information.

For local government (Exhibit A)

Tell us how much your community would like to join the trial and about existing facilities and resources in the community.

For residents and community groups (Exhibit B)

If you'd like a Google fiber optic trial in your community, complete this section of the request for information.

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1. Introduction

What is Google doing, and what does it seek to achieve?

Imagine sitting in a rural health clinic, streaming three-dimensional medical imaging over the web and discussing a unique condition with a specialist in New York. Or downloading a high-definition, full-length feature film in less than five minutes. Or collaborating with classmates around the world while watching live 3-D video of a university lecture. Universal, ultra high-speed Internet access will make all this and more possible. We've urged the FCC to look at new and creative ways to get there in its National Broadband Plan – and now we're announcing an experiment of our own.

Google is planning to build and test ultra-high speed broadband networks in a small number of trial locations across the country. We'll deliver Internet speeds more than 100 times faster than what most Americans have access to today with 1 gigabit per second, fiber-to-the-home connections. We'll offer service at a competitive price to at least 50,000 and potentially up to 500,000 people.

As a first step, we're putting out a request for information (RFI) to help identify interested communities. We welcome responses from local government, as well as members of the public.

Our goal is to experiment with new ways to help make Internet access better and faster for everyone. Here are some specific things that we have in mind:

Next generation apps: We want to see what developers and users can do with ultra high-speeds, whether it's creating new bandwidth-intensive "killer apps" and services, or other uses we can't yet imagine.

New deployment techniques: We'll test new ways to build fiber networks, and to help inform and support deployments elsewhere, we'll share key lessons learned with the world.

Openness and choice: We'll operate an "open access" network, giving users the choice of multiple service providers. And consistent with our past advocacy, we'll manage our network in an open, non-discriminatory, and transparent way.

Like our WiFi network in Mountain View, the purpose of this project is to experiment and learn. Network providers are making real progress to expand and improve high-speed Internet access, but there's still more to be done. We don't think we have all the answers – but through our trial, we hope to make a meaningful contribution to the shared goal of delivering faster and better Internet for everyone.

Key Events & Projected Dates:

- Issuance of request for information: February 10, 2010
- Response Deadline: March 26, 2010

Google reserves the right to modify any of these dates. Any changes will be published on this website.

2. Legal Statements

Confidential Information Notice

Google does not seek any proprietary or confidential information as part of your response. Accordingly, please do not submit any information that you do not want to become publicly available. Google will not be under any obligation to treat submissions as confidential and Google may disclose submissions to third parties as part of the evaluation process. All information and data contained in your response should be submitted on an unrestricted basis.

Disclaimers

Legal Status

This RFI does not constitute, and should not be interpreted as, a contract between Google and any entity or person for the performance of any obligation. Instead, the RFI seeks to identify required information from communities and to establish a common framework within which an agreement for a fiber trial may be reached.

The submission of a response to the RFI, and subsequent evaluation of that response by Google, also does not constitute a contract or any type of agreement between Google and any respondent for the performance of any obligation. Only the execution by Google of a written contract will obligate Google in accordance with the terms and conditions contained in any such contract. All responses to this RFI become the property of Google.

Responses to this RFI may not be made by employees of, consultants to or other persons connected with Google. By submitting a response to either portion of this RFI, each respondent certifies that no employee of, consultant to, or other person connected to Google who has been or is associated with the respondent has participated in preparation of the response.

Any personal information Google receives as part of the RFI will be used by Google only for purposes of planning and running the services. Google will only share this information with third parties where necessary for planning and running the services.

Cost of RFI

This RFI does not commit Google to pay any expense incurred by you in the preparation of your response.

3. Instructions to Respondents

All responses to this RFI should be submitted through the interactive response forms found on the website: <http://www.google.com/appserve/fiberrfi>. In order to respond to this RFI, you will have one of two options:

- Full community response by a local government interested in having its community serve as a trial location
- Other interested parties and non-governmental respondents, explaining why the trial should be held in the respondent's community.

If any item in the Local Government RFI is unclear, a written request for clarification may be sent to Google. Such requests must be sent only through the website by selecting the contact link in your response.

An FAQ can be found here: <http://www.google.com/appserve/fiberrfi/public/faq>

The completed response to the RFI (local government or by other interested parties) must be submitted through the website. The interactive response forms are designed to allow you to begin your response, and then save it and come back to it for further work. The response will only be finally complete when you have clicked the "Save and continue" button for the response. Once you have submitted your response, it can no longer be edited.

All responses must be submitted no later than 5:00 pm (PT) on the Response Deadline date. Any submission submitted after the deadline will not be accepted; however, Google may make exceptions at its sole discretion.

Responses will be evaluated and ranked by a selection team designated by Google for that purpose. Google may make a decision on how to proceed with respect to responses at any time without further notice. Upon completion of Google's evaluation, Google will provide information about the responses and next steps. As one possible outcome of the RFI, a short list of responding communities may be asked to provide further information, though this will only occur at Google's discretion.

All communications to Google regarding the Local Government RFI must be made solely through the website, please use the contact link in your response.

4. FAQ

What is Google planning to build?

Google is planning to build and test ultra-high speed broadband networks in one or more trial locations across the country. We'll deliver Internet speeds more than 100 times faster than what most Americans have access to today over 1 gigabit per second, fiber-to-the-home connections. We'll offer service at a competitive price to at least 50,000 and potentially up to 500,000 people.

Why is Google doing this?

Our goal is to experiment with new ways to help make Internet access better and faster for everyone.

What criteria will Google use to select the communities for this project?

Above all, we're interested in deploying our network efficiently and quickly, and are hoping to identify interested communities that will work with us to achieve this goal. We also want to want to work with a community where we can bring significant benefits to residents and develop useful proofs-of-concept that can have a broader impact. For example, we're looking for opportunities to experiment with deployment techniques that can inform and accelerate broadband deployment elsewhere as well.

To that end, we'll use our RFI to identify interested communities and to assess local factors that will impact the efficiency and speed of our deployment, such as the level of community support, local resources, weather conditions, approved construction methods and local regulatory issues. We will also take into account broadband availability and speeds that are already offered to users within a community. The RFI is a first step – we plan to consult with local government organizations, as well as conduct site visits and meet with local officials, before announcing our final decisions.

When does Google expect to announce a target community?

We plan to announce a target community or target communities this year.

How much will the services cost?

The final price has not yet been determined, but we intend to offer service at a competitive price.

Why would consumers need 1 Gbps connections?

In the same way that the transition from dial-up to broadband made possible the emergence of online video and countless other applications, ultra high-speed bandwidth will drive more innovation – in high-

definition video, remote data storage, real-time multimedia collaboration, and others that we cannot yet imagine. It will enable new consumer applications, as well as medical, educational, and other services that can benefit communities. If the Internet has taught us anything, it's that the most important innovations are often those we least expect.

When does Google expect to have a 1 Gbps network up and running?

Today's announcement is the first of many steps along the way. It's too early to announce a definite launch date, but our hope is to have a network up and running as soon as possible. Right now our focus is on finding the right communities for our trial.

What do you mean by "at least 50,000 and potentially up to 500,000 people?"

We have not yet determined the size of the trial, which will be based in large part on the availability of appropriate locations. We expect that we will provide this service to a minimum of 50,000 people and up to as many as 500,000 people, most likely in multiple communities.

Can I submit on behalf of a non-city municipality?

Yes, we will accept responses from any type of municipality including counties, military bases, reservations, etc. Please use the "local governments" link if you are a government or municipal official; otherwise please use the "residents and community groups" link.

Who is allowed to submit a response on behalf of a municipality?

Respondents should clearly state the position in which they represent their city. We encourage responses from city managers, elected officials, and mayors. If you do not represent your city, please submit a statement of interest for residents and community groups.

What if I don't have all the information needed to complete the RFI?

We are asking municipalities to provide as much information as possible about their location, but all submissions are welcome. Please fill in as many of the fields as you can and let us know of any special circumstances that might be affecting your submission.

For local government (Exhibit A)

1. General information

* Required fields

Name of governing body: * _____

You can create a name for each response. Name of this response:

List communities included in your response:

These may be autonomous units of government contained within the boundaries of the responding entity (such as towns within a county), districts or neighborhoods within a town, or adjacent units of government responding together (such as a joint response of multiple counties or towns).

Contact person:

Name: * _____

Title: _____

Address: * _____

State: * _____

ZIP (5 Digit): * _____

Phone number: _____

Email: * _____

Contact person has authority to provide these answers as the official position of the responding local government?

If not, please provide contact information for the local government official who does have such authority:

2. Background information about your community

Population (2008): * _____

Populated area in square miles: * _____

Please describe how the population is distributed

Median household income (\$ per annum)" * _____

Number of housing units: * _____

Number of single family homes: _____

Number of multi-family homes: _____

Number of apartment complexes: _____

Average number of units per apartment complex: _____

Number of gated communities: _____

Average number of housing units per gated community:

Approximate percentage of households in entire community with access to broadband Internet service (%):

Approximate percentage of the households in entire community that are currently subscribing to broadband Internet service (%):

Terrain:

Overall description of terrain:

Percentage of plains (%): _____

Percentage of rolling hills (%): _____

Percentage of mountains (%): _____

Percentage other terrain (%): _____

Climate:

Average annual highest temperature (°F): _____

Average annual temperature (°F): _____

Average annual lowest temperature (°F): _____

Average amount of snowfall per year (inches): _____

Average amount of rainfall per year (inches): _____

Average amount of hurricane or tornado activity in a year (days):

Local government:

Form of local government (city, town, county, etc.): *

Local government rule: Home Rule - Limited Rule - Other

Source of government decision making (city manager, city council, mayor, etc.):

Utilities:

Please list largest utilities and the approximate percentage of the community covered by each provider:

Provider Name	Coverage (%)
Electric _____	_____
Gas _____	_____
Water _____	_____
Sewer _____	_____
Cable _____	_____
Phone _____	_____

Local economy mix (if available):

Number of high tech jobs: _____

Number of manufacturing jobs: _____

Number of education services jobs: _____

Number of other service sector jobs: _____

Colleges and universities (List names and average number of students enrolled at each, if available):

Major hospitals/health care facilities (List names):

Current providers of high speed Internet service (Company; DSL, Cable modem, wireless, fiber, etc.):

Other significant features of your community that could be relevant for this project:

3. Collaborating on a Google fiber trial

In this section, we ask you to share how your community would work with Google to enable us to proceed quickly and effectively.

Are you, the local government, willing to appoint an individual to serve as a single point of contact (1)? *
Yes/No _____

(1) A single point of contact to coordinate the local government and community's interactions with Google, to obtain as promptly as possible whatever information Google may require, and to resolve any problems that may arise as quickly and effectively as possible.

If so, please describe the responsibilities and authority that this individual will have:

Describe any current or planned programs in your community to accelerate and expand adoption and use of broadband Internet access:

Additional reasons you believe that Google should select your community for this project:

Please provide a web link to any additional information you wish us to consider. Submissions using Google Maps or YouTube are encouraged:

Google is interested in working with communities in which it can rapidly install fiber-optic facilities and offer ultra-high speed Internet access services. Google respects the legitimate responsibility of local governments to preserve and protect community assets, minimize disruption, ensure the safety of the public, address aesthetic concerns and property values, and obtain reasonable compensation for the use of public assets.

4. Your community's support

Have you performed any outreach, study or analysis regarding support in your community for this type of trial? *
Yes/No _____

Describe how you ascertained or plan to ascertain the level of community support for this project (e.g., surveys, public hearings, meetings with community groups, etc.):

If possible, describe your community's level of support for this project:

Please briefly summarize any additional comments or suggestions you would like to make to Google on behalf of your community:

5. Facilities and resources

Deployment of a community-wide fiber network will require Google to work closely with local government entities and other organizations. Google seeks to identify resources owned by the community that may assist in the rapid, smooth deployment of a residential fiber optic network. In this section, we ask you to share information about particular facilities and assets within the community that may be used or affected as part of such a facilities deployment, particularly those owned by the local government.

Please respond as completely and accurately as possible.

Pole Attachments:

Please identify the entities, including units of the local government, that own or control utility poles in your community:

Entity Name: _____

Number of poles owned or controlled: _____

Annual rate per pole for pole attachment:

- by telecommunications carriers (\$): _____

- by cable system operators (\$) _____

- Internet access providers (\$): _____

Entity Name: _____

Number of poles owned or controlled: _____

Annual rate per pole for pole attachment:

- by telecommunications carriers (\$): _____

- by cable system operators (\$) _____

- Internet access providers (\$): _____

Entity Name: _____

Number of poles owned or controlled: _____

Annual rate per pole for pole attachment:

- by telecommunications carriers (\$): _____

- by cable system operators (\$) _____

- Internet access providers (\$): _____

If the local government will make its own poles available for attachments by Google, please estimate the number of days to complete the following steps, assuming full cooperation from Google:

Negotiation of a master pole attachment agreement: _____

Issuance of permits for individual attachments: _____

Developing specifications for make-ready work: _____

Completing make ready work: _____

If a unit of your local government has access to poles owned or controlled by third parties that it could make available to Google, please provide the following information:

Number of poles: _____

Entity or entities that own or control the poles: _____

Rate that you would charge Google (\$) per pole per year: _____

Describe any restrictions on your right to make such poles available to Google:

Please identify any state or local laws, ordinances, rules or other legal measures that govern access and rates for attachment:

Please provide contact information for any entities named above:

Conduits:

Please identify the entities, including units of local government, that own or control utility conduits in your community:

Entity Name: _____

Linear feet of conduit owned or controlled: _____

Annual rate per foot for conduit use (\$):

- by telecommunications carriers (\$): _____

- by cable system operators (\$) _____

- Internet access providers (\$): _____

Entity Name: _____

Linear feet of conduit owned or controlled: _____

Annual rate per foot for conduit use (\$):

- by telecommunications carriers (\$): _____

- by cable system operators (\$) _____

- Internet access providers (\$): _____

Entity Name: _____

Linear feet of conduit owned or controlled: _____

Annual rate per foot for conduit use (\$):

- by telecommunications carriers (\$): _____

- by cable system operators (\$) _____

- Internet access providers (\$): _____

If the local government will make its own conduits available for use by Google, please estimate the number of days to complete the following steps, assuming full cooperation from Google:

Negotiation of a master conduit agreement: _____

Issuance of permits: _____

If a unit of your local government has access to conduit owned or controlled by third parties that it could make available to Google, please provide the following information:

Linear feet: _____

Entity or entities that own or control the conduit:

Rate that you would charge Google (\$) per linear foot per year: _____

Describe any restrictions on your right to make such conduit available to Google:

Please identify local laws, ordinances, rules or other legal measures that govern access rights and rates for conduit use:

Please provide contact information for any entity named above:

Public Rights of Way:

Does your local government directly control and administer the use of all public rights of way within its jurisdiction? _____

Describe any other entities that control and administer the use of the public rights of way in your community:

With respect to your process for managing access to public rights-of-way, please estimate the number of days to complete the following steps, assuming full cooperation from Google:

Negotiation, approval, and issuance of a master right-of-way agreement: _____

Issuance of construction permits: _____

Post-construction inspections and approvals: _____

Please indicate the amount or method of calculating all fees and charges for use of the public rights-of-way, including the following (if applicable):

Application fees: _____

Linear foot (or other) usage fees: _____

Inspection fees: _____

Other fees or charges: _____

Community sensitivities and policies:

Please describe any historical districts or other culturally or environmentally sensitive areas: *

Please describe your under-grounding plans and policies, if any: *

Please identify unique ordinances, rules, policy statements, and other legal measures specific to your community that Google would have to comply in developing a fiber project:

6. Construction methods

Has your community worked with, studied or evaluated the following types of construction methods for fiber to the home networks:

Aerial _____

Trenching _____

Boring _____

Micro-trenching _____

Plow _____

Rock Saw _____

*Check approved methods of construction for your community: **

Aerial _____

Trenching _____

Boring _____

Micro-trenching _____

Plow _____

Rock Saw _____

None/Other _____

Are there other construction methods that are approved for use in construction of fiber to the home or other telecommunications networks in your community? If so, please list them below:

7. Regulatory issues

Please describe the local regulatory obligations, if any, that would apply to Google if this project went forward in your community.*

Please describe local business obligations and taxes/fees, if any, that would apply to Google if this project went forward in your community:

For residents and community groups (Exhibit B)

* Required fields

Your name: * _____

Your organization or community group: _____

If you are responding on behalf of an organization or community group, please describe it:

City: * _____

State: * _____

Why should Google build a fiber to the home network where you live? *

Web link to supporting material (YouTube videos and other creative submissions are encouraged!):

Additional Information

Check any/all that apply.

What kind of Internet services are available where you live?

Dial-up _____

DSL _____

Cable modem _____

Fiber to the home _____

Wireless _____

Other _____

None _____

Don't know _____

What kind of Internet service do you primarily use at home?

None _____

Dial-up _____

DSL _____

Cable modem _____

Fiber to the home _____

Wireless _____

Other _____

Don't know _____

What company provides your home Internet service?

- AT&T, SBC _____

- Verizon _____

- Qwest _____

- Comcast _____

- Road Runner, Time Warner _____

- Charter _____

- Cox _____

- Cablevision _____

- AOL _____

- EarthLink _____

- NetZero, Juno, BlueLight _____

- CenturyLink, CenturyTel, Embarq _____

- Other _____

What is the advertised speed of your home Internet service? Please round to the nearest megabit per second (Mbps).

"Less than 1 Mbps" _____

"1-5 Mbps" _____

"5-10 Mbps" _____

"10 Mbps or faster" _____

"Don't know" _____

What is your actual download speed during the evening?

You can use a third-party website like [Speedtest.net](https://www.speedtest.net) or [Bandwidthplace.com](https://www.bandwidthplace.com), or other tools at [Measurement Lab](https://www.measurementlab.net), to measure your actual download and upload speeds.

"Less than 1 Mbps" _____

"1-5 Mbps" _____

"5-10 Mbps" _____

"10 Mbps or faster" _____

"Don't know" _____

What is your actual upload speed during the evening?

You can use a third-party website like [Speedtest.net](https://www.speedtest.net) or [Bandwidthplace.com](https://www.bandwidthplace.com), or other tools at [Measurement Lab](https://www.measurementlab.net), to measure your actual download and upload speeds."

"Less than 1 Mbps" _____

"1-5 Mbps" _____

"5-10 Mbps" _____

"10 Mbps or faster" _____

"Don't know" _____

How much does your Internet service cost per month?

"Free" _____

" Less then \$10" _____

"\$10-20" _____

"\$20-40" _____

"\$40-60" _____

"\$60-\$80" _____

"\$80-\$100" _____

"\$100 or more" _____

Is your Internet service "bundled" with other services like TV and phone?

- Yes _____

- No _____

How many times in the last month did your high-speed Internet service not work correctly, slow down or frustrate you?

"Never it's great!" _____

"1 to 5 times" _____

"6 to 10 times" _____

"More than 10. Boo!" _____

Describe the quality of your home Internet service customer support:

What would you like to see improved about your current service? Check all that apply.

Lower price _____

Faster speed _____

Higher reliability _____

Better customer support _____