***

MODERATOR: Good afternoon.

My name is Bob atkinson, I am Director of policy research at the institute of telecommunications information, based at the Columbia business school.

I am here today as a moderator of the roundtable.

I am not an employee of NTIA, or any government agency so any comments I make can be attributed only to me and certainly not any government agency and probably not to CITI or Columbia university.

The last roundtable for today is the roundtable on rural and unserved areas, representatives from a number of stakeholders will participate in a roundtable discussion on this topic and I will introduce those panelists in a moment.

Procedural each of the panelists will make a very brief comment building largely on the questions

and topics that were raised in the joint rest for information last week.

As a reminder comments on that request for information are due on April 13.

I would strongly recommend that anyone who is interested in these topics and subjects use that as a vehicle to provide NTIA and RUS with your thoughts and recommendations.

The program is being webcast and also on teleconference, so for the last 30 minutes of the program, members of the audience here, the Department of Commerce auditorium and with people participating on the web and webcast will have an opportunity to ask questions and make comments.

Based on what we have seen over the last day and a half, there have been some very interesting comments and questions and very stimulating questions.

I would certainly like to note that my observation that these roundtable discussions are extraordinarily open and a transparent process as I just mentioned just a second ago.

NTIA and RUS really wants your inputs.

They have the RFI, there is lots of ways to provide thoughts and information to these agencies and they welcome your participation greatly.

Let me quickly introduce our speakers for today.

On my left, Geoffrey Blackwell, the Director of strategic relations and minority business development of the Chickasaw nation.

In that role he provides analysis on new market strategies and business opportunities.

He is also chairman of the telecommunications subcommittee of the national Congress of American Indians and is responsible for

coordinating with federal agencies and elected officials concerned with tribal lands serving six years as the senior attorney and liaison for tribal governments for the telecommunications commission.
To Geoff's left is Eric Peterson, the executive Director of the RCA rural cellular association, happens to be my initials as well, RCA is the leading association representing tier 2 and 3 wireless providers who serve 25 million wireless consumers in virtually every state.
To Eric's left is dean Manson, Senior Vice President and General Counsel, Hughes communications, Inc., enterprises and small governments before joining in the year 2000 he was formerly in the law firm.
To dean's left is John Rose, president of OPASCO an association of 5 hundred rural telecommunications companies.

Prior to his four years he served Four years with RUS and ten years as an officer in the United States Navy.

To John's left is Tracey Steiner. As one of the national rural electric cooperative association's senior corporate counsel she works with members on legal and policy issues to aspects of electric cooperatives, core and diversified business activities her responsibilities include representing the electric cooperatives on members of telecommunications policy, E-Commerce and consumer protection.

And last and certainly not least Joycelyn Tate, associate media broker of the MMTC, the minority media and telecommunications council.

She is also chair of the rural broadband working group, which expands affordable broadband to

minorities and others in rural communities.

NTIA and RUS have a monumental task ahead of them.

And our job today is to try to help them.

They have to figure out a way to implement the American recovery and reinvestment act in a way that produces the greatest broadband bang for every taxpayer buck.

And excuse me, among other things that means that NTIA and RUS have to adopt rules, develop contracts, solicit proposals, review the proposals when they come N select those that best satisfy the statute and the award criteria and on and on and on.

It's a mammoth task and the thoughts and suggestions of experienced experts such as we have here today will hopefully help NTIA and RUS get that job done as quickly and as effectively as possible.

The topic is rural and unserved
areas.
This is again a very important
definitional aspect of the
implementation of the act, and as
somebody observed, earlier in one of
the earlier panels sometimes
definitions dictate outcomes and
that's why these definitional issues
are in fact so important.
One purpose of the NTIA's BTOP
program is to provide broadband
access to consumers in unserved
areas.
What is an unserved area, then, is
the obvious question.
How do you know it and how do you
define it.
They require 75% of the areas served
with a U.S. supported project to be
in a rural area.
What is a rural area?
How do you know it, and how do you
define it?
And is unserved and rural, are they

always the same, if they are not the same, what are the implications, for example.

It is important for all the stakeholders to understand these terms, for what they mean in the broadband stimulus program.

So, let's get on with it, and our first speaker on this panel is Geoffrey Blackwell.

Geoffrey, step up here.

MR. BLACKWELL: (In other language) my name is Geoffrey Blackwell, I did have the pleasure of providing testimony in the field in Las Vegas.

I find myself fielding first, maybe because my last name begins with B but I wasn't given the opportunity to provide rebuttal or maybe cross-examination if we have attorneys.

I am here because tribal lands are unserved.

You heard from so many different tribal voices in the field and in

Las Vegas and Flagstaff because tribal lands are unserved.
We have provided a slide for you to take a look at that summarizes the positions of the national Congress of American Indians and I am not going to read through that slide because you can read it yourself.
But I want to draw some particular aspects out of it to help lend some ideas to this discussion, this panel today, to help NTIA and RUS, because each one of these perspectives comes from the unserved area of tribal lands.
Regarding the definition of broadband, we need an evolving definition that is adaptable and scaleable.
We need accountability and transparency and local control.
Our ultimate concern around the discussions of speed that have occurred in the field, is that we have a cautiousness based on cynical

fears from historical experiences in our underserved regions.

We need sustainability and we need a genuine orientation towards community growth potential.

On this subject of speed, one of my colleagues from the Pacific northwest suggested that 1.5 Mg as a baseline minimum is a place to begin that discussion.

I would agree with that but with the same historical sin civil I would reiterate that it takes 3 Mg to provide any meaningful solution to educate tribal youth and 10 Mg of telemedicine services to distance diagnose broken bones.

On the definitions of unserved and underserved from the unserved perspective one must find a definition that accurately measures how broadband can support the growth of these communities into their rightful place in the tableau of the United States.

You must have criteria that measures joblessness, that measures the deplorable healthcare statistics on tribal lands and the educational academic potential of our students. From the perspective of Indian country, prioritize unserved appropriately.

We know we can't ask for all of the money in this act.

It would be inappropriate and ultimately would be counterproductive.

But prioritize whether the criteria threaten the overall community health of a region.

It is very important that the government consult as it rolls out these projects consult with tribal nations that already have solutions. You have heard from many different peoples around Indian country, all of the presenters, I personally have been to their reservations, and I have seen their solutions and I have

seen how those solutions have been successful because they have not been simplistic one dimensional offerings.

They are offerings that meet all the need of a tribal community and governmental community that must care for the health, safety and welfare of their community.

Often it falls on itself to provide uses where others have not.

When you talk about eagle back, South Dakota, sakaton, Arizona, plummer, Idaho, this is not a place where a K street or Wall Street business plan has a general opportunity for success.

One must look at the potential for broadband and look at the specifically impourished challenging nature of growing a business in these regions, and act appropriately.

Perhaps this is a place where the government's money in this regard is

the best spent or the dollar would
go the furthest.
You must prioritize where the
potential can be met.
We may not be down this road again.
It is the genuine governmental
obligation under this act, the
congressional intent to help us
develop our economies.
Tribal governments and intertribal
organizations, when it comes to this
country we are the institutions that
this act envisions we can help
coordinate and effect wait these
programs across Indian country and
these would include but not
exclusively include the national
Congress of American Indians, the
national tribal telecommunications
association, native public media,
the affiliated tribes of northwest
Indians, the united south and
eastern tribes and several others.
With that I will thank you for your
time.

MODERATOR: Thank you very much.

MODERATOR: Our next speaker is Eric Peterson.

MR. PETERSON: Thank you.

On behalf of the nearly 1 hundred wireless carriers, members of the rural cellular association, I am pleased to be with you to provide input into this ambitious and timely proceeding.

As Robert noted in his brief introduction, the carrier members of RCA collectively serve more than 25 million rural customers in virtual every state of our nation.

Together these carrier members have a footprint that today covers more than 75% of the United States.

The majority of these companies have been designated to receive support from the universal service fund allowing them to provide wireless service to consumers in the most rural and remote parts of our nation.

All of these companies rely on their USF support to build out and maintain wireless service in places that otherwise would be economically unfeasible to serve.

To these carriers the prospect of obtaining broadband grants or loans like those authorized under the American recovery and reinvestment act of 2009 is needed to further advance their technology and leap frog them to a level of service they probably would not otherwise expect to achieve in the next five years. Ideally, with funding available through the recovery act, RCA members will soon be providing rural customers and those visiting rural America access to broadband services on a par with service provided in our nation's population centers. These broadband loans and grants coupled with possible changes to section 254 of the communications act would make broadband a supported

service that would go to realize a long ways, to realize the president's goal providing wireless broadband to the four corners of our nation.

RCA suggests that the federal managers of this initiative look within the Commerce Department, namely the Census Bureau to define what constitutes a rural area.

If it Z you will find that the Census Bureau generally defines rural areas as those not classified as urban.

The Census Bureau generally defines urban areas as areas with a large central place and adjacent densely settle census blocks that together have a total population of at least 25 hundred for urban clusters or at least 50 thousand for urban areas.

The Census Bureau delineates urbanized areas and urban classified boundaries to encompass densely settled territories consisting of

core census groups or blocks that have a population densities of at least 1 thousand people per square mile and surrounding census blocks that have an overall density of at least 5 hundred people per square mile.

The Census Bureau definition of rural and urban areas have evolved, and reflect changes in census technology and the nation's population trends.

Perhaps most importantly, however, adoption of the Census Bureau's definition will help ensure that broadband stimulus funding is targeted at a granular level to the rural areas that need it most and distribute it in a fair and impartial manner.

As to the definition of unserved and underserved, RCA offers the following, unserved areas should be defined as areas where consumers have no or unreliable access to

conventional broadband services
including hardline, cable or
wireless.
Underserved areas should be defined
as areas that do not have access to
broadband service that is reasonably
comparable in function, speed, or
cost to broadband services provided
in urban areas.
RCA appreciates this opportunity to
provide comment on this very
important initiative, and looks
forward to playing an active and
constructive role in bringing
wireless broadband service to rural
America.
Thank you.
MODERATOR: Our next speaker is dean
Manson.
MR. MANSON: Thank you, Bob.
On behalf of the satellite industry
association, I would like to thank
the NTIA, RUS, and FCC for the
opportunity to participate in this
important forum.

The SIA is a Washington, D.C. based trade association representing leading global satellite operators, service providers, manufacturers, launch service providers, and ground equipment suppliers, SIA is the unified voice of the satellite industry on policy, regulatory and legislative issues affecting the commercial satellite industry.
The satellite industry whole heartedly supports the stimulus program bringing broadband to consumers who are not adequately served has been the core mission of the industry.
Today we are pleased to announce that between Hughes and wild blue we have over 8 hundred thousand subscribers to our broadband internet service in the 50 states we cover the entire United States so any consumer or small business can subscribe at speeds up to 5 Mbps depending on the service select.

So echoing the comments from the panel, if you think of unserved of households that have no provider able to provide them with a broadband, there is technically no one who is currently unserved, however, cost can get in the way of a consumer's practical access to broadband, particularly the unfront cost of equipment such as in our case, a satellite dish and other in home end user equipment.

Through the stimulus program we hope to immediately expand the broad reach of broadband by providing subsidies providing free equipment to consumers for broadband service. This is possibly the most shovel ready of all projects since consumers need only place an order and the service could be installed and activated immediately.

Looking only slightly further down the road for proposals in building new infrastructure, our in our case

satellites, we could bring consumers faster speeds for the same or lower prices.

What does this mean for the definitions of unserved, underserved and rural?

First and foremost, we believe efforts should be focused on areas where there is no other broadband access method currently available.

It has been widely reported that about 10 million households currently do not have the population density support for terrestrial based broadband service by helping to make satellite more affordable in these areas the government can immediately accelerate deployment and economic development.

In a sense it might be convenient and in some ways preferable to ignore the term "areas in the statute.

We don't have the luxury of doing that given the way the statute has

come out that these ten million households that currently do not have terrestrial based access we think are you ultimately the target. One thought in terms of how to deal with the structure we have been given and to define unserved areas is depicted on the slide here down towards the bottom.

It would be to take the form 477 data that is available to the FCC and we think it's important echoing comments from a prior panel to rely on existing data.

I agree it's somewhat backwards in terms of the ideal picture, to complete the mapping project first and then use the more comprehensive data but as a practical matter we have to work with data that is available now.

And the FCC has a lot of data through form 477 forms we can take that data and link the zip codes in the order of lowest to highest rate

of existing broadband penetration. Grants could then be prioritized toward the areas that have the lowest penetration rate, say, for example, the bottom third.

It could also help to look at generally what constitutes a served area.

That might be something that we could -- picking up again on some of the comments and questions from the prior panel we could look at the aspiration and what's our goal of the project.

We want to increase the penetration rate.

We can define a target penetration rate and consider geographic areas, perhaps zip codes that are below that target rate as unserved or underserved and those above just for purposes of having prioritized the limited funds that are available as adequately served.

Whatever definition is select, we

believe it should be something that relies on available data and can be implemented quickly.

In summary the satellite industry is pleased to be positioned as an immediately deployable part of the picture to bring deployment of broadband to unserved and underserved members.

Thank you.

MODERATOR: John Rose.

MR. ROSE: I am the president of POPASTC, our median size company is about 3 thousand companies, so we are a group of small companies.

And we believe that rural areas and all areas deserve broadband.

We believe that it should be both mobile and land line.

We want to define unserved as 768 kbs and underserved as under 12 Mbps.

Today's definition of broadband is about 90% of our area and 10% unserved and we think funds need to

go to that 10% unserved as well to get broadband out but we really think we should look at speeds as well.

For our 90% people that have available broadband we have a take rate of only 40%.

So we need to look at how we get that other 50%.

And I think speed matters.

If you have higher speeds, you have more content, have you a higher take rate.

And take rate is important to us.

If you have higher speeds you have more commerce, more jobs, better education.

Kids, higher take up.

For lower income we need higher speed as well and I will get into subsidizing but I think there are ways for lower income to use cloud computing to minimize cost.

Speed matters for education, for medical for managing public safety

for management emergency providers and it matters for security.

I think we need to look at covering both coverage and upgrading our networks to compete globally.

In rural areas commerce and jobs equal availability on coverage, high speeds and high take rate.

And we have to take care of all of those.

We need reliable networks, otherwise business and consumers won't do it.

We need sustainable networks for the long-term.

We need finances for the short-term which the stimulus will provide but we also need to consider the long-term and we need to consider the middle mile or back haul in access to the internet because we have high charges for this and that inhibits our ability to cover the area as well as the high speeds.

We think by getting stimulus money it's a downpayment on the future.

We could get fiber deeper in our territories so we can upgrade speeds as well as coverage.

We think a successful stimulus package includes low-income perhaps, jobs, commerce and training.

Low-income programs, I think David already talked about taking a lifeline link up and make it broadband.

I agree 100 percent with that. We need to do that. We need to educate the consumer on what's on the internet, how to use it, and what to do in small companies are willing to step forward and do that.

We need to figure out ways to put people in broadband that necessarily don't have a computer.

Maybe on line TV and other consumers electronics but we need that as well.

We talk about a market for speeds and high speeds, it's the chicken and egg concept.

If we don't have the network we
can't put the content and if we
don't have the content we don't need
the network.
We think it should be performance
oriented we shouldn't push it down
to the low level we should push it
up to performance so we can get the
commerce, educate children and have
the medical stuff.
That's why we are looking at speeds
as well.
Our independent carriers with
associations have 5 hundred there,
it should be 7 hundred, we have
established networks, we know our
customer base and we are shovel
ready to accomplish the stimulus
goals.
We thing grants go further than
loans, we need more sustainable
business models, we want to be
eligible for funds, we want to
partner with public governments and
whatever to do, but we want to do

this.

And we make progress, but we need to make progress and we think the stimulus package makes rural areas competitive not just in cities but everywhere around the world.

Even though we have availability for 90%, the low-income is extremely important to us.

Educational needs are important to us, high speeds are important to us and we need to make sure that mobility is important.

That should have a different standard from the 768 kbs.

We want to make sure to increase take rate if we increase our take rate we could cover a lot more people in addition to the people that don't have adequate coverage.

Thank you very much.

MODERATOR: Our next speaker is Tracey Steiner.

MS. STEINER: Good afternoon.

You may be wondering why someone on

the electric industry is sitting on this panel today, so I would like to provide a little background about the national rural electric cooperative association and its members.

NREC's members are electric cooperatives.

Electric co-ops are utility companies that are owned by the consumers they serve.

In total that means 42 million customers in 47 states.

There are 864 distribution cooperatives and these cooperatives serve communities from remote Alaskian fishing villages to extended suburbs of major metropolitan areas.

Cooperatives operate with the lowest consumer density.

The average is seven consumers per mile of distribution line.

With density this low it's not surprising to see why we don't see a

lot of DSL and cable modem broadband offered in these communities.
Creating a consumer business model based on density at this low level is a significant challenge. Still a number of NREC's members provide internet and broadband, and in providing broadband over a variety of platforms including satellite, WIFI.
Broadband as it has been said before enables a lot of things it enables improved healthcare, education, and business opportunities and it can do that in rural communities.
The need for it there is even more urgent today.
The median per capita income of electric cooperative consumers is 21 thousand 435 dollars.
This is 21% below the national average.
According to USDA's reports unemployment and poverty rates are rising significantly in rural areas.

Simply put, we need broadband and we
need it now.
It's NECRA's hope that NTIA and RUS
will develop programs that are
inclusive.
Unfortunately existing broadband
programs have fallen short of
expectations and we believe this is
at least due in part to the fact
that definitions and eligibility
criteria have been written to be
overly restrictive.
Definitions, such as using a maximum
population number only to define
when an area is rural.
Those kinds of definitions are less
than ideal for identifying
communities in need, communities
that are lacking adequate broadband
service.
NRECA is still formulating an
opinion about what an exact better
definition might look like but at
this point we would like to
encourage everyone to look at the

definitions that we do have.

They have something in common.

They establish common bright line thresholds and these kinds of definitions have the ability to create arbitrary divisions, so that areas for project buildouts that fall just under the threshold are eligible, while those that fall just a hair above are now deemed ineligible.

Congress should not include these definitions in the legislative language and therefore we should look at this as an opportunity to craft something better.

Thank you.

MODERATOR: Our last speaker is Joycelyn Tate.

MS. TATE: Thanks, Bob.

And I would like to thank NTIA and RUS for providing this opportunity to the minority media and telecommunications council to participate in this most important

roundtable discussion.

While the voices of our country's populations in rural and unserved areas are finally being heard so let's make sure we hear and respond to them correctly.

Current data that is used to assess broadband penetration in rural areas tends to overaccount for rural broadband penetration.

Zip codes in rural areas tend to be quite large and thus result in data that shows broadband services available within some rural zip codes but not necessarily reflect availability of broadband within the entire zip code.

So more granular mapping data is needed to truly and accurately determine the rural areas in which broadband is lacking in order to increase service and adoption in those areas a.

In some low-income areas we are faced with additional challenges.

One of those is once we get broadband to the home, how do we get it into the home?

Many homes in rural areas, take for instance, wearwood, Virginia, are populated with low-income residents. These houses don't have the proper three-prong electrical outlets that are needed to plug in computers or other hardware associated for adoption.

Houses in those areas and other areas throughout the country tend to be old homes, sometimes public housing with antiquated electrical wiring that may not accommodate broadband related equipment.

This issue must be addressed or rural broadband adoption goals will fall far short.

Sometimes when I talk to people about broadband and unserved and underserved community they say, oh, you mean people in the country and rural areas?

Although that's true it's a misNomer to believe that all unserved populations in this country are in rural areas.

Many unserved communities are in urban areas where broadband service is the highest.

The structural reasons for this disparity in both rural and broadband are linked to poverty, red lining, unemployment, race and language.

And these disparities are unlikely to be eliminated by the marketplace.

That's why it's critical and important that in addition to serving the populations in rural areas the broadband needs of unserved urban populations must also be addressed because in the original buildout unserved urban areas was made several years ago with low speed service technology.

That's why in addition to getting the rural populations off dial-up

and on to broadband it's vitally important that unserved communities in urban areas which oftentimes tend to be minorities and low-income populations are also slated to receive supplemental infrastructure development so that both rural and unserved you were ban populations can achieve parity in broadband service.

Otherwise we will create a rural/urban digital divide.

On that same note I would like to also say there should be parity to broadband service to colleges and universities in rural areas and colleges and universities in urban areas that have served native Americans, African Americans and Hispanic Americans.

I be thank you for this opportunity to provide this and we will do what we can for greater broadband adoption for all people.

Thank you.

MODERATOR: Thank you very much.
We got, I think some very
interesting presentations and the
thing that struck me most -- well,
the thing that struck me most, dean,
I heard him say, correct me if I am
wrong, problem solved.
Satellite is everywhere.
I would be interested to know if
other panelists agree that there is
no unserved area, effectively no
unserved area because there is
satellite everywhere.
 MR. ROSE: I will answer that. I
think satellite is good but there is
limitations I think in speeds you
want to get full broadband I think
it doesn't cut it all the way and I
think satellite leaves a lot of
people unserved.
MODERATOR: How about on the tribal
areas?
MR. BLACKWELL: I would add that one
size does not fit all.
One technology does not fit all.

There is no one solution for all of Indian country.

As many different tribes as there are there are as many different challenges, geopolitical, terrain, historical challenges.

It is far too simplistic to say -- actual I more prefer the statement, one size fits none.

Now that having been said I think every technology represented on this panel is going to have a solution in Indian country and in many places it will be an AMALGAM of several of them but I cannot agree there are not unserved places in the United States anecdotally in Indian country we have a 5% to 8% penetration rate.

Much of that has been provided by the tribes, their own -- their own initiatives, some of whom have testified in these hearings.

So -- no one size does not fit.

MODERATOR: Which probably gives a little bit of equal time.

So any response, dean?

MR. MANSON: We certainly wouldn't attempt to suggest that satellite is the solution for every place, even though it is available everywhere in the country but the economics of satellite are so compelling especially when you get into areas where it isn't economic to dig trenches and run wire line solutions.

There are large areas of the country where broadband by satellite is available, can be accessed but it is cost prohibitive in terms of cost of equipment.

Yes, it is technically available everywhere but economically important it is not practically available for folks who cannot provide the equipment.

So we think the stimulus program will help us to bridge that gap as a practical matter to people who can make best use of it.

MODERATOR: Anybody else?

The speed -- is speed -- we have heard speed sometimes as high as 1 hundred Mbps and as low as 768 KBPS as being appropriate thresholds, I would like to hear more in the underserved in determining what is underserved versus unserved.

I would like to hear more comments on the speed issue and where some thresholds might be?

I know some of you spoke about it during comments, just to hone in on that.

MR. PETERSON: If you were using speed as the entry level determinant for eligibility, I would say that's probably not going to serve the intent of the legislation or the president's goals very well.

I think perhaps maybe having aspirational objectives, something to build out towards, is probably the better strategy with regard to speeds.

MR. ROSE: I think speed and
coverage are both important but I
think speed means a lot to take
away.
The more you can get on broadband
the more content, the more for
education, the more for medical,
that means you have higher take-up.
By the way the reason I have these
sunglasses on, is I had a cataract
operation and these lights are
killing me.
MODERATOR: I hope that it was
successful.
MS. STEINER: Speed is one way to
measure a level of service, I don't
think it's the only way.
Like my fellow panelist at the end
there, a one size type definition is
problematic, and you end up picking
and choosing technologies when the
act specifically says that many it
should be technology neutral.
Speed is relative.
More is better but if you only have

dial up, then even a marginal
improvement to first tier current
FCC broadband definition looks
really, really good.
MODERATOR: Geoffrey?
MR. BLACKWELL: I would add that the
congressional intent is pretty clear
here.
Our host agencies are charged with
coming up with community oriented
definitions.
Now many believe that this is -- you
know, this is implicit and there are
majority directed in rural
populations.
And there are many that believe as
previous definitions of broadband
they believe they have been majority
industry driven definitions that
now, the reason why there is this
intent to create a community
oriented definition is there is
skepticism and there is a lack of
confidence that private market would
provide this service without this

sort of direction in this stimulus
money.

So I think it's very important when
we talk about speeds to have that
element of future growth in mind.

 MR. ROSE: I agree with that and I
think we need two different speeds
one for mobility service and one for
computer service.

MR. BLACKWELL: This point was made
by dean in the previous question
that you asked.

When we talk about -- when a
statement is made about something is
not feasible, not affordable or
feasibility and affordablity to
whom?

There have been many tribes in the
United States that have been forced
to become their own de-facto
carriers of last resort because the
business model did not make sense to
somebody else when perhaps it was a
one dimensional residential service
based business model.

And many of these -- well members of tribal nation, PASCO, with leadership positions on your board, there are a number of service operators operating out of spectrum. Tribes at home are forced to make a -- find a way to make it work even if it does mean going into deep debt and becoming experts at cyclical task management at RUS.

I think we need to keep in perspective where we are talking about, we are talking about unserved regions.

MODERATOR: Eric had pointed to the existing census definitions as a means for identifying rural areas. I.e., rural area is anything that isn't urbanized just a statistical analysis of a census block.

I would be interested in reactions from any other panelists, whether that sort of preexisting standard is -- might be suitable or is there some better way to make that

differentiation?

MS. TATE: I think when we are looking at unserved, I don't think looking at that specific definition works.

Like I said in my presentation, there are many unserved populations in urban areas, so a definition needs to be established that would take those people into consideration.

They are surrounded by people and surrounded by neighborhoods that are highly serviced and they are in an unserved area.

MODERATOR: I was going to follow-up about the question about whether we were talking about unserved individuals or unserved areas and I will come back to you in a second.

Rural is an important definition at least to the RUS program, and perhaps that is how RUS already does their allocations.

I'm not sure of your spots.

MS. STEINER: I will try to marry your points.

Certainly a number of areas are unserved but they don't serve as a proxy for one another.

Using census data has historically driven electrification programs through RUS.

But as the agency's mission extends to water and waste water programs and broadband programs and other telecom services, different definitions have been adopted by Congress and put into the statute over time.

And they vary up to I believe 20 thousand people.

But again this gets back to the same problem of drawing a bright line on a one dimensional measure.

When you look at rural areas in a broader perspective, it's a function of total population size, it's a function of density and it's a function of remoteness or distance

from a more urbanized area, so you can look at it in multiple different perspectives, and I don't know that one is necessarily better just because we already used it before.

MODERATOR: But the comment about the one dimensionality, the NTIA and RUS dilemma, part of it as I understand it, is speed to get the program up and running and money distributed immediately.

And presumably at least an advantage of either preexisting definition or a bright line, you know, a binary decision on some of these things has the benefit of speed.

It may not be as he will elegant.

Is there a fast elegant solution to these problems?

MR. PETERSON: Not to take pride in ownership but when we proposed this definition we looked at the example that RUS uses and we also looked at other regs, and we found that there are several dozen definitions within

the Department of Agriculture for
what is rural.
So we thought, well, there is
reference in the RUS language, and
there is reference in other places
to the census bureau, so we came
back to the census bureau and looked
at their definition and we thought
it was probably one that offered the
most logical ability to defend and
second of all the most flexibility.
For example, you can say in census
blocks of 5 hundred people, but it
doesn't have to be 500, it could be
501 or 494 or some reasonable range.
We would hope and several other
panelists expressed the position as
well that there be some discretion
given to those who will ultimately
make the decisions on these grants
and loans, and that there would not
be this rigid bright line that if
you are an inch over you are not
eligible, and if you were inch
behind you are not eligible, you

have to hit it right on the mark.
Because there isn't that kind of a
community in place in the country --
MODERATOR: So you think human
judgment rather than just running
through a computer and having it
spit out who is in and who is out.
MR. PETERSON: I would think that
most Americans would say some
modicum of human judgment is
necessary.
MODERATOR: Let's go back to
Joycelyn's prior comments.
Does the law really -- is it really
talking just when it says unserved
area, and we have been talking about
unserved communities and unserved
peoples.
Does it really make any difference
or is it literally a geography
issue?
MS. TATE: I don't think it's just a
geography.
Yes, it is a geography issue and a
personal issue.

When you have rural communities --
I'm sorry, urban communities some
that may be within an area and they
have been red lined for a number of
years because of the reasons I
mentioned, unemployment, language
disparities, waste.
Those are considered unserved areas
regardless of their geographic
location through the urban area.
They have been -- there is a bright
line where they have been drank out
and excluded by the marketplace.
So the definition for unserved --
>> So you can envision an area which
might on its face seem to be served
but we -- in that geographic area,
individuals who are unserved.
MS. TATE: Yes.
MODERATOR: Any other comments on it?
MR. BLACKWELL: Getting back to the
original question.
I would agree with Ms. Tate that
there is greater need for
granularity, certainly in the

instance of tribal country several tribal leaders instruct Meade that the data doesn't represent Indian country when it comes to telecommunications and the penetration rate.

Many have told me that their penetration is far lower or cyclical in nature, dependent on limited budgets.

People go off service in the cold of winter because they have other critical infrastructure.

I would agree with some of the comments you made on the 477 report and the inability of zip coding to adequately measure our penetration in Indian country.

I think a human element with an understanding of a bit of the different history of how Indian country was created would be quite helpful to efforts of these two agencies to their mission among the tribal lands.

With over 562 recognized tribes
there is only 313 nations in the
United States.
There are several tribes who are
landless, there were several tribes
whose tribal lands were eradicated
and have checkerboard situations
that get right to the comments that
Ms. Tate is making.
So there is a level of reality that
would not rely on a report from one
particular agency.
We would be happy to work with the
agencies on a forward going basis to
help them understand this.
The FCC has done a deep amount of
work in this regard with respect to
several service and it may be a
repository of information that would
benefit these two agencies as well.
MODERATOR: Let me get off that topic
for a second and another theme came
up from the last panel and we had a
last speaker in the audience
speaking strongly about the middle

mile and back haul issues and John
raised it here.
I would be interested to know in the
tribal lands and other parts of
rural America, if the middle mile
back haul issue and cost of
availability was solved does the
last mile just come along much more
automatically?
And a lot of discussion has
seemingly been focused on the last
mile.
So this is a new milestone in the
discussion, talking about the middle
and the back haul.
MR. MANSON: I think it makes a
tremendous difference whether you
have actual last mile assets or
middle mile access.
Satellite over the years has done a
tremendous job of filling in the
areas in a population that --
where -- there is access.
MODERATOR: You mention satellite.
Can satellite feed wifi and would

share a 5 Mbps signal?

MR. MANSON: We use satellite for back haul of wifi systems.

But even for providing the actual last mile, there are plenty of folks, for example, who live in an area that might otherwise have access to terrestrial broadband but their drive way is too long to connect them or they were too far away from the neighbors and they may be in a county that is otherwise pretty well served.

Back to your main question, it is inescapable that we have to rely solely on available data just in the timeframe of getting it done in the timeframe that is required.

I think there has to be a priority of doing it quickly and fairly.

The statute does call for consultation with the states and that is a place where more targeted input and more human touch can be brought to bear, albeit quickly.

There has to be an emphasis that it
is done quickly.
MODERATOR: John Rose?
 MR. ROSE: As we cover -- as we
increase the speeds, as we begin
increase of take rate, we are going
to have a tremendously grueling
spans of back haul and access to the
internet back bone, and if you put
that on a fewer subscribers, it's a
tremendous cost, and we think some
of the stimulus money could be well
served to go to back haul.
MODERATOR: We will start Q & A in a
few minutes so if people want to get
to their positions on the
microphones, it would be a good time
to get there.
Does anybody on the panel have
reactions to the other panelists
that they violently agree or
disagree with.
Particularly this hour of the day
the violent disagreements keep
everyone much more on their toes.

MR. PETERSON: Both John and dean
make very good points about the
issue of back haul and when you were
commenting to the Congress as this
legislation was moving through we
strongly urged that this stimulus
money be used or a portion of it be
eligible to be used for back haul.
That is probably the most expensive
proposition as far as the wireless
community is concerned, the cost of
towers and the back haul on those
towers.
Some of our providers use microwave
but there is a wire connection
somewhere.
MODERATOR: What are the costs of a
wireless operatorer, how much does
that amount to?
Bigger than a bread box, smaller
than a battleship?
How big is it?
MR. PETERSON: I can't estimate it
but the cost of back haul could be
at least 25% of the operation, maybe

more.

And that's why there is so much interest on the part of the rural areas with roaming and things of that nature to offset costs.

A lot of our carriers doing microwave, some of them have actually gone to situations where they don't have their towers connected at all by the wire because of those bad phone calls

>> It is significant and hopefully as agencies develop the re:ings and you get a finer program.

We will get other means to cover that middle mile.

 MR. ROSE: I think the middle mile and access to back bone can exceed the 25%.

It's a significant problem.

For land line and wireless.

MODERATOR: Looks like we don't have a lot of audience participation but we will gin some up.

The rule being identify yourself and

let us know if it's going to be a comment, a question directed to someone if possible.

The clock is at the front to give you a cue as to the minute that we would like you to stay within in something the questions.

And go ahead, microphone number 1.

>> Right.

My name is Kelly Bonnham, I work with telecom services we are a rural middle mile last mile and back haul provider.

We have about 4 thousand route miles of Mike wave.

We do microwave because fiber is not cost effective.

This is a comment -- there are actually two.

One of the reasons getting to the rural or underserved definition might be to apply the E rate test.

We do a lot of E rate work, and I think you might find a fairly direct correlation between high E rate

eligibility 80% or better and unserved or underserved areas.

One of the areas that we do provide services on the the net are on the Arizona portion of the Navajo nation that's a 90% nation and I don't think anybody would argue that the Navajo is an unserved or underserved market.

And the other question about back haul and middle mile cost, it is very high.

We pay on some of our networks when we get rural service from other carriers as much as 7 hundred dollars a megabit for back haul.

We don't build our own because of issues involving rights of way.

Thank you.

MODERATOR: Anyone have a comment on his comment?

He wasn't offering any question.

MODERATOR: Why is back haul so expensive for this middle mile?

Is it just because it's in a

relatively dense geographic area?

MR. ROSE: I mean, that's right.
Distance is a problem, and it's not
a regulated thing, and a lot of time
we only have one way of getting out
and we have to go to the companies
that provide it.

MR. BLACKWELL: I agree with what my
fellow panelists said it would serve
the commission and some of these
agencies to consider the middle mile
and back haul.

What we are talking about fiber and
it is the most expensive instance in
Indian country but it leads to all
of the types and potentially leads
to all the types of services that I
highlighted in my slide.

And I would hope that this
discussion would lead into something
that we have been a little remiss in
discussing and that is a great
concern of ours in Indian country
which is, of course, sustainability.

MR. MANSON: I would add that it is

most expensive to back haul
terrestrial service is probably
those areas where it's most cost
effective to provide coverage by
satellite.
MODERATOR: Microphone 2.
>> Mike DeFalco Appalachian
regional commission.
I have a couple of comments that
might be a little bit offtopic.
But when you brought up the issue of
bringing speed into the mix in terms
of defining unserved and underserved
maybe they are appropriate.
The first question, is it more
important to get broadband coverage
where it doesn't exist than to get
increased or better coverage where
it does exist?
And the second question, is it
appropriate to use a government
subSidity coming from these grants
to build a competitive network in an
area that already has broadband
service even if the new network

would provide a higher degree of
broadband service and what about the
ramifications to the private sector
provider who first built the
network, because now they have a
subsidy being brought in that will
build a competing network.
MODERATOR: Those two questions will
probably take up the rest of the
afternoon in a sense, but they are
very good questions.
Let's do the first one first.
MR. MANSON: To chime in quickly.
Congress stated two goals among
others, that there is a direct
requirement to bring broadband to
unserved areas and to bring
broadband to currently underserved
areas, and vulnerable populations
and they didn't prioritize between
the two.
So I think it's fair to say that
both are goals that implementing
agencies have an opportunity to
establish an overall goal if there

were to be a master goal of reaching
a certain penetration rate or
bringing the country to a particular
level of broadband adoption and
clearly the folks that don't have
effective access to broadband ought
to be heavily looked at as
beneficiaries of these programs.
MR. BLACKWELL: I do believe that
there are -- we may not have this
opportunity again.
There are places in the United
States that in Indian country that
face not just a digital divide but
an analog divide.
And risking being left even further
behind.
These are palpable.
This is reality in Indian country.
We have very challenging statistics.
You know, we are hoping that this
sort of investment will help us on
things like our high infant
mortality rate compared to elsewhere
in the United States.

It's an interesting academic
question in this room.
I would hope that as I said earlier,
we are not expecting to get all of
the money here, but I expect and I
hope that it would be prioritized in
the places where the lack of service
is dangerous -- dangerously
attacking this definition of
community that we are trying to
arrive at.
On the second part of the
question -- MODERATOR: Let's do the
competition point later.
Any other comments on the first
question.
MR. PETERSON: I think the point
that I would want to make here is
that it really depends on the merits
of the proposal.
But at the same time I think we
ought to not look at this particular
pot of 7 billion dollars as the one
and only time that this is going to
occur.

I would like to think of this more
as kind of a pilot, to see what's
feasible, what the needs are, what
the opportunities are, and as
everyone has commented, it's kind of
a disappointment that we do this and
then we do the mapping and then we
do the plan or we ought to do the
planning first.
But it is what it is.
And I am hopeful that out of this
will come clearly a rationale for
moving ahead so that we can -- so
that we can meet the kinds of needs
in a sustainable way that Jeff is
identifying, that we can address the
competing interests where you've got
anchor institutions in communities
that really would benefit and they
are not being served by a perhaps --
perhaps by a broadband provider that
is already in the community.
There are a lot of competing
interests and I think our objective
here with regard to this exercise is

to give the administrators of this
program enough flexibility to be
able to prioritize what they think
are the best of the proposals no
matter whether it happens to be one
that is going into a community that
is already served or whether it's a
situation where this may be the only
opportunity that is perceived to
being present for the time.
MS. TATE: I have to concur.
I don't think this is going to be
our one and only shot at this.
This is a pilot.
And this is an opportunity for those
people who have not had a voice
before to finally be heard in the
issues to be addressed.
So I look at this as a way to make
some clear definitions, model
definitions, try to find ways to
take this program once it is
completed and moving forward to
start including people because
otherwise the gap is going to get

larger and larger, so I concur with
my panel members who say we should
look at this as a starting point and
not an ending point and look to
build on this and to try to lay the
ground work, so we don't have these
unserved communities and under
served communities that we have now
and to try to bridge that gap.
MODERATOR: I was going to switch to
question number 2 and ask you to
respond to it first, John, about the
question about whether your small
telephone company members.
 MR. ROSE: I think coverage and
speeds are both important to our
country.
And I understand how we got to make
these compromises.
The thing with competition, we had a
big debate in our membership, and we
decided we need to be forward
looking and we have to compete, we
will compete but we need to make
sure this money goes to getting

broadband out there, getting take
rates and coverage and speeds but we
are willing to compete and whether
there is a second person in the
area, if that happens, that happens,
but we think we can compete.
MR. BLACKWELL: On the subject of
competition there are many places in
Indian country that wish we have the
demographics for competition.
In several places we just don't.
We don't have situations that were
envisioned by the 96 act and it's
competitive framework.
In places where tribes have served
themselves and essentially 10, 15
years ahead of the curve have made
investments those investments become
trust assets.
Those become an extension of the
tribal government itself.
And the government must seek to
consult with tribes and analyze
these situations where what could
otherwise be called subsidization of

artificial competition, artificial
competition could harm that asset,
and could harm the services that are
being provided to this critical
mission of tribal governments and
other communities within our
boundaries.

That is very important.

It is not -- and I said this in Las
Vegas and I will reiterate it here.

It is not an anticompetitive
attitude.

It's an attitude that simply
realizes what is actually the
situation in certain parts of Indian
country.

And I would agree with panelists
that have said that we need to look
at this stimulus bill as a pilot
project bill.

I don't think that is exactly the
correct term, but it is seed money,
and we want to seed our economies
and have them grow as well, but
there are places that need --

without this jump-start it may never come.

MODERATOR: This may be another area where judgment may be required.

MR. BLACKWELL: I think the elements of sustainability have to be examined in a level of detail heretofore have been left unsaid by government.

MODERATOR: Granular analysis.

MR. BLACKWELL: And where the areas are.

A couple of panelists mentioned universal service, and the subcommittee at the national Congress for native Americans was created by a group of tribal telecommunications companies who were perhaps the leading edge of seeing these sustainability issues and the necessary nature of high cost and low-income provisions in the universal service model.

So it is the experience of those who begin services in any country sooner

or later have to become expert in areas of universal service.

As we look towards sustainability we look to those in the majority of the industry to see what their offerings are.

Now when I said earlier that we are skeptical, that is because less than three years after the Federal Communications Commission wrote the special enhanced tribal lands link up provisions it had to instigate a series of enforcement actions to require very familiar majority stake holder holder company names.

We were still looking for partners, we are looking for opportunities we want to work with those who see the opportunities we see but the sustainability of this, we are very doubtful about.

MODERATOR: Up to number 3.

>> I am Harry rush with the Appalachian regional commission.

Over the last 19 years we have been

funding strategic telecommunications planning along with aggregation of demand aspects, developing mapping, and also leading to business case models where our rural area which we have talked about a number of times here, 42% of our region is declared as rural compared to the United States.

Where we have seen these processes go through from beginning to end, we have also stepped behind these projects and put in broadband development, deployment, wireless situations, et cetera. We have yet to see a single project go under, because what they have done up front is done the planning, put the business case model together, organized the community to serve all sectors, and what they have ultimately got at is they're deciding on their future and they are putting a market business case forward.

This creates the competition.

You build the backbone or build the infrastructure, the WISP's, and ISP's and other people can make a business case model if they are not having to eat their return on investment.

Thank you.

MODERATOR: Thank you.

Microphone number 4.

>> First of all Jerry piper with the telecom alliance in the State of Idaho.

MODERATOR: Could you step closer.

>> Can you hear me now?

That wasn't an advertisement.

Jerry piper with the Idaho telecom alliance in the State of Idaho.

Just real quick comment on the satellite.

I would suggest that the comment that it can reach everyone, would he suggest that he hasn't tried to install very many of them west of the continental divide.

Second of all, there has been a few
of the folks on the panels that have
actually been bold enough to select
a speed.
Most of them say whatever the FCC
says or whatever they describe as
unserved is okay.
What I was wondering is if in terms
of education and in terms of
telemedicine, if the panelists were
those people receiving the broad
band for those services, what speed
would they accept, since I think
speed is going to be the definitive
thing here, what speed would they
accept to deliver those video
services and what speed would they
accept that they would expect to
receive those video services in a
manner that they could actually do
something?
 MR. ROSE: There is a very good GAO
report and I forget the number, that
just came out in February, that
lists, you know, different speeds

and different applications.

But for medical high definition medical, they list 75 to 1 hundred Mbps.

If you look at that, there is a lot of stuff that the GAO report has, and forget the name of the report.

But it's very good.

MODERATOR: I have it in my brief case.

I could probably run back and get it.

MR. MANSON: To address the first part of your comment were you suggesting that it's difficult to install satellite west of the continental divide.

>> It's easy to install.

It's the 2 hundred thousand P foot mountain in front of the guy's yard.

>> There is some areas where you can't see satellites but those tend to be few in number and certainly in those areas it wouldn't be a feasible solution.

MODERATOR: Speeds of applications.
If it's not medical imaging which
may be or doing remote surgery which
might be one level to adjust video
conferencing or you know, streaming
videos, whatever we are talking
about.
MR. PETERSON: I don't have any
problem with aspirational speeds and
certainly John has made the point
with regard to the GAO study and
what the recommended speeds for
those various applications are.
But there should be different speeds
for wireless and different speeds
for wire lined because they have
different capabilities and again
those are some of the flexibilities
that need to be part of this
initiative.
MODERATOR: Number one.
>> Hello I work for international
broadband electric communications.
We think setting a minimum threshold
speed is imperative to these

agencies.

Without it, my question would be how do you determine where there is competition and where there is not?

We have talked a lot about there are subsidized areas that there are pockets of them and they are rural and urban.

But without setting a threshold speed how do you determine what is unserved and what is under served.

MODERATOR: Just as a question.

>> Wed currently provide up to five mg up and down.

MODERATOR: Clearly there has to be some sort of speed indicated and the definition of broadband itself is one place where that can be done.

Obviously we are talking about broadband and we are not talking about dial-up and we ought to be talking about speeds significantly better than dial-up.

So that would be the primary place to put a speed threshold.

MODERATOR: Both for unserved and underserved.

MR. MANSON: Certainly with underserved but talking about broadband top the extent that I thought broadband for unserved and broadband for underserved, yes I think there has to be some reason why it couldn't be equated dial up.

MR. BLACKWELL: I think in Indian country that 5% -- I think we suffer from speeds that are well below national averages for the same sorts of services that our government's trying to provide.

I think it's important to aim at a level that is worthy of this stimulus funding, that is worthy of government investment.

There is a nervousness that if the speed is too low that there will be a rush to that speed and there will be a rush to that speed and that we will get left behind again when emerging technologies can do even

more wonderful things than they can do now.

It's also important to be said that whatever the speed is, it has to be sustained and symmetrical.

It can't just be burst.

That is one thing uniform across Indian country that technologies hold.

>> Jackie McCarthy with PCIA the wireless infrastructure association with a brief comment because wireless may be the only practicable path to broadband in many areas that currently do not have broadband we think underserved should include any area in which there is no wireless broadband coverage.

In these areas customers do not have ubiquitous service and the benefits brought about by competition with wireless are the greatest to the extent that economic or other circumstances have left the areas behind and to the extent that K

street Wall Street business plan Mr.
Blackwell referred to is not
feesible funds can change that into
a possible business case.
Thank you.
MODERATOR: Microphone number 3.
MR. BLACKWELL: Can I respond to
that?
Just pulling a few threads together
from the various comments.
When I mentioned K street and wall
street business plans what I am
juxtaposed about is the demand
aggregation plan that Mr. Rush
referred to earlier.
There are a number of people in
rural, remote -- number of entities
in remote America that could learn
from the kind of presentations he
makes.
I made reference earlier, too, that
we lack the kind of competition
envisioned by the 96 act.
Much more often we are trying to put
together demand aggregation models

than competition models.

MODERATOR: Okay.

We were at microphone number 3, I believe.

>> Okay.

I have a question following my statement.

I will admit that the easiest service for us to sell as a service provider is 1 hundred MG services.

We get 30 times more revenue from services and the companies that need it don't hesitate to pay.

However, what is interesting, is that the largest volume of business comes from people who want the lowest priced service.

You have a full tier of service anywhere from 1 to 10 mg's in 90% of all inquiries choose the slowest speed service they can get because they would rather have the lower price.

They don't have the demand for that broadband.

So the question I ask the panel, is
if there are people in urban and
underserved areas who have a
critical need to have broadband, why
would it not be sufficient to take a
slower speed service if 90% of the
area most likely would probably only
select the slower speed?
Would that not be adequate for the
need?
If you needed the fast speed,
somebody would build it and somebody
would pay for it.
MS. TATE: I think the reason they
choose the lower speeds are for
economic reasons if the universal
service funds could be applied to
broadband to supplement the costs I
think they would choose higher speed
services, I think it's income based,
if I can't afford it, if I can
barely afford it, I get what I can
afford.
>> That's a good point but the big
argument -- MODERATOR: We are

getting tight on time.

Stay up there.

If we make it around we will okay.

>> Ms. Herrerra.

Montgomery Maryland.

We have farming land in rumor

Montgomery County, Maryland.

The rural issue is important even

when you have urban areas in the

state.

My question is, in a lot of cases

whether it's fiber or putting up

towers, we certainly do that, it

just cost a fortune to get it to the

low density areas.

So from the members of the panel in

the rural communities, would you

agree that price per Mbps should be

part of the definition for served

and under served?

MR. PETERSON: No.

MR. MANSON: I think it's a key part

of the consideration.

I'm not sure if it's in the

definition necessarily.

I could see it possibly working that way but I think you hit on a critical point.
And how much it costs to bring a mega bit per second to end user consumer has to be part of the equation.
If you are in a densely populated area it makes sense but if you are in a widely diverse non-dense area, things like satellite are more effective.
MODERATOR: We were talking about threshold questions with definitions and I think I would take your response to be it could also be an award criteria factor.
MR. MANSON: Yeah.
MR. PETERSON: And my response wasn't meant to be flippant but I think that is part of a business case, that the applicant would have to look at, and certainly if it's -- if it's not economically feasible even with a broadband grant at

whatever amount of money might be available, then obviously it's something that can't be done under this particular program and that's one of the reasons, why, for example, we advocate the amendments to the universal service fund, the telecommunications act, with regard to the applicability of the universal service fund to sustain the service so that in fact if it is economically infeasible in it's barest form, there is an opportunity to supplement it and to bring the price down to a point where in fact consumers can afford to buy it and providers can afford to operate it. And to your point about rural areas in densely normally thought of densely populated areas, that was one of the key points as to why we liked the Census Bureau version because it takes into consideration that there are very rural areas in places like Montgomery County

Maryland or Fairfax County,
Virginia, or counties in Illinois.
MODERATOR: Stay there.
We are getting late, towards the end
I want to make sure everybody gets a
first crack.
Number one?
>> I am frank Cumberland, president
of broadband in Wisconsin it's
getting late so maybe my brain is
tired, but I haven't heard really a
debate on what you define rural to
be.
If you accepted the definition of
rural as it is defined today by the
census or USDA, I am wondering if
somebody, if you feel in this
proposal on this program that we
ought to revisit and get tighter in
a more formal definition of what
rural is.
 MR. ROSE: I think, Bob, you asked
the question a while ago can we get
an elegant definition?
I am not sure that is possible.

Census blocks is one way to do it
and I think the FCC had five officer
six years ago they put together
putting to the Census Bureau and did
not match the cost.
Now there are different type of
models using satellite over laying
road technology and video stuff
gives us a better look at clusters
of people.
I think the mapping program we need
to look at the mapping, we need to
look at census blocks and clusters
and roads but I agree it needs to be
much more granular but I'm not sure
there is an elegant definition out
there.
MODERATOR: We will talk about
mapping on Monday afternoon at this
time.
>> Thank you my name is Andrew
Langer president of the institute
for literacy, we are focused on
small business and entrepreneurship.
And what I have is more in the way

of a comment than a question.
We tend to take a skeptical view of
government involvement in the
marketplace in any case, usually as
evidenced by there is no small irony
in a government building and I can't
get broad band or internet access
while I am sitting here.
MODERATOR: You had have to apply for
a grant.
>> I will and I think Mr. Blackwell
makes a compelling point here, that
I really don't know if this is going
to be the end or the beginning, I
would like to think it's the end of
massive government stimulus
packages, but if it isn't or if it
is, we should be serving people who
haven't gotten served first that
those people who have no access or
are dangerously critical in access,
they ought to get served first.
That is the position that my
organization will take when we are
providing comments.

MODERATOR: I appreciate that you are filing comments and I would like to remind everyone that the date is April 13.

>> Just a quick response.
My point is that underserved Americans are -- urban Americans are choosing to be underserved equivalent to rural providers I think rural needs more broad band and underserved needs more broadband.

And sometimes -- rural isn't necessarily being left behind but using the money for more than rural needs does leave somebody behind so I think there should be a balance.

And I ask that NTIA considers a balance to make sure adequate funds goes to each need.

MODERATOR: And your second shot.

>> First I would mention that because people wherever they may live may decide that they don't want to have to pay twice as much for

five times as less service as the
rest of the world it shouldn't mean
that they did it by choice and it's
an option.
My question is following up on price
points.
Should -- because the purpose of the
act, one of them was to spur demand,
should projects that provide service
at low free or cost effective
extending service should those
projects get more points in any kind
of application process?
MODERATOR: I will let the panel
answer that, but that has come
back -- let's come back next Tuesday
because award criteria is exactly
what we will be discussing on
Tuesday.
MR. BLACKWELL: I would appreciate
knowing where the gentleman from
Mike number 3 is from.
Because like the lady at microphone
4, I dispute your premise.
It is surprising, because I don't

think you intended to say that certain folks are not interested, so we shouldn't -- we should keep them uninterested.

It sort of smacked of that.

I cannot hear what you are saying.

>> Okay.

What I mean is everyone deserves faster speed.

Rural isn't being left behind because they don't have it we are all left behind if we don't have faster speed.

We all make due or we all get faster speeds.

MODERATOR: Let me take a note that we have gone past the 4:15 mark.

So I think we need to wrap up.

Before I ask for some acknowledgment of the great panel, I want to remind everyone that we are back here next Monday and Tuesday.

On Monday, topics are nondiscrimination and interconnection obligations, the

role of the states and broadband mapping.

On Tuesday, most award compliance and oversight, selection criteria, and community economic development.

So I believe those are going to be some interesting topics and I hope to see you here next Monday and/or Tuesday.

I would like to thank the panel for an interesting and stimulating conversation this afternoon.

And those of you who have to travel, have safe travels, and see you next week.

Thank you.