THE BROOKINGS INSTITUTION

THE STATE OF THE CAPITAL REGION’S HOUSING

Washington, D.C.
Monday, May 20, 2019

PARTICIPANTS:

Welcome:

JENNY SCHUETZ, David M. Rubenstein Fellow, Metropolitan Policy Program
The Brookings Institution

Presentation:

LEAH BROOKS, Director, Center for Washington Area Studies
The George Washington University

Moderator:

ALLY SCHWEITZER, Reporter, Business and Development, WAMU 88.5

Panelists:

SARAH COYLE ETRO, Assistant Director
Loudoun County Department of Family Services

A.J. JACKSON, Executive Vice President, Social Impact Investing, JBG Smith

ANDREW JAKABOVICS, Vice President, Policy Development
Enterprise Community Partners

BRIAN J. McCABE, Associate Professor of Sociology, Georgetown University

Closing Remarks:

JACLENE BEGLEY, Economist, Fannie Mae

* * * * *
MS. SCHUETZ: Hi, I am Jenny Schuetz, a David and Rubenstein Fellow at the Brookings Metropolitan Policy Program. And thank you for coming to join us for the presentation of the “State of the Capital Region’s Housing.”

As all of you who live in the D.C. region know housing is expensive, it's the single largest item in most families' budget and the cost of housing just keeps going up, and up, and up over time. Right?

So, this is a problem for individuals, for families, for employers who want to retain and attract good workers, this is a problem for local governments and nonprofits that are trying to help their residents make the ends meet.

So we are very excited today to release the report. The report that you're going to see shortly is a collaborative effort. So, I worked with three colleagues, Leah Brooks who is an associate professor at George Washington's Trachtenberg School of Public Policy, she's also the faculty director of the Center for Washington Area Studies, which is the umbrella group that is releasing the report.

My other two co-authors are Jaclene Begley, who's an economist at Fannie Mae; and Brian McCabe who's an associate professor of sociology at Georgetown.

So this was very much bringing together a number of organizations to work on the report on an issue that is important to people from different academic disciplines, and different walks of life.

So, I'm not going to talk for very long. I'm shortly going to turn it over to Leah who will give you sort of the key findings from the report.

But I wanted to take a moment just before we start to talk a little bit about, sort of -- it may seem a little unusual to you that Brookings is giving a report about housing in the D.C. region. So, many people know Brookings as an Institution that focuses on national or even international public policy, and traditionally we have done more of that than focusing on the policy issues in our own backyard.
That said, there are some noted scholars who have engaged very deeply with the D.C. region, and as many of you may have read, last week we lost one of those colleagues.

So Alice Rivlin had been at Brookings for many, many years, she had all sorts of obituaries written about her talking about the important federal policy roles that she held, as director of the Congressional Budget Office, vice chair of the Federal Reserve Board.

But any of you who have been working with D.C. policy and politics over the last several decades will probably have encountered Alice in a different capacity. She was very deeply committed to the District's financial sustainability; she worked closely with Former D.C. Mayor Tony Williams to help bring the district out of financial insolvency.

Alice believed very firmly that the people of D.C. -- rather than Congress -- should have control over their own budget, and that the District's government should have a stable resource base in order to address its community needs to be able to pay for public schools, and health care, and things like affordable housing.

So Alice, unfortunately, couldn't be here with us today, but we are hoping that we are going to be able to do some ongoing work in the D.C. region.

Brookings as an Institution is anchored in a community, and people like Alice and I believe that Brookings should not turn its back on its hometown, that we should devote some of our scholarly resources and expertise to making the District and our region a better place for all of its residents.

So I want to start by having a moment of silence to observe the memory of Alice. (Moment of Silence) Thank you.

And we are also going to actually observe Alice and the fact that there is a box here next to me. This is the Alice Rivlin box for people who need a little assistance to rise up behind the podium; and so Leah is going to come and stand, fittingly, on the Alice Rivlin box, and give us our report.
MS. BROOKS: Thank you, Jenny. Hello everybody. As you see I needed the box. In fact, Alice Rivlin is taller, taller than I am. It's an honor to greet you all. It's also an honor to stand on Alice Rivlin's box.

As Jenny said, this report is co-authored and Jackie, and Brian, you, me. I also want to say thank you to Deepak Agarwal who did most of the graph work for this presentation. To Hillary Silver, who helped us write about homelessness; and also to Julia Greenberg who helped us write and edit the report.

So with no further ado, this year we are talking about housing growth and affordability, and I want to briefly introduce the Center for Washington Area Studies.

So our mission as a Center is to improve the lives of people in the Greater Washington area. Our goal is to study the area to provide a data-driven set of policy recommendations, and research that makes the area both cohesive and helps us better understand where we live with the goal of improving people's lives.

So, here's the bottom line from the report. Since 1980 housing values have grown quite substantially, so you can see the peak here with the boom in housing prices, but even absent that there's been a substantial growth in housing prices over this period since 1980. And this is probably clear to almost everybody in the room, because you can see other people's housing prices.

It's harder to see other people's income, but we do know that that income has not risen like housing prices over this period. And, you know, if housing prices were rising but income was too, we wouldn't be so concerned. So what's concerning is the divergence between these two trends.

So what we do in this report is we have two parts. The first part we discussed the amount and location of new housing in the Capital Region since 2000, and then in the second part we provide some demographic and economic statistics on each individual jurisdiction in the region.

So, I'm going to walk you through the first part and I'll spare you the gory
All right, so the first chapter of the first part asks: where and how much new housing is built? And we're going to define the area, the Washington D.C. Capital Region, in this way. We have the dark-blue urban areas: that's D.C., Arlington and the City of Alexandria; we have suburban areas in light-blue, and then we have exurban areas surrounding that in green. Remember those colors because they're going to go through the rest of the graphs. Okay.

So, the first fact we want to share with you is that housing growth in this area is since 2000 is predominantly exurban, so this chart is showing you the number of housing units built by each type of jurisdiction. And I think you can be easily misled walking around downtown D.C. and seeing building cranes, but don't be, now that you've come here, you will know that the predominant growth is exurban.

And then we can divide that growth by region and what you can see when you divide the growth is that exurban growth is about half accounted for by Loudoun and Prince William counties, that suburban growth is predominantly in Fairfax and Montgomery Counties. and that the urban and suburban growth is just slightly under the total exurban growth.

And in this picture what we're showing you, is median housing value along the X-axis in 2000 and the percent change in the number of housing units on the Y-axis. So, if you can read the green words kind of at the top of the graph, you will see a -- you will see Loudoun County.

So, Loudoun County has had over 75 percent housing growth since 2000 we considered taking it off the charts because it's so off the chart, but we kept it on, so you could get a true sense of what's going on in the region. And you can see that the higher the original median housing value as of 2000, the fewer housing units were built over about the next two decades.

In the second chapter we look at how many units the new housing
structures have. So, let me give you a little bit of background. These are structures that are built before the year 2000. This is the share by unit types. So, of structures built before 2000 most of them were single-family, and then there's, you know, a fair chunk that are 15 to 19 units, and some that are more than 50 units.

So, this is telling the share of units. So, most units are single-family, but there's, you know, in the region there are some multi-family units. Now, we are going to compare that with the share built after 2000, so that's the darker purple bar on top.

And I think what's striking when you compare these two figures, and this is a period over which the region adds a lot of people, who do an awful lot of talking about transit, transit-oriented development, the benefits of density, and we're still building an awful lot of single-family housing, and people like it. I do.

So, at the bottom of the graph what you see is the divergence in the multi-family housing that after 2000 we have switched to building substantially more, 50 or more unit structures. And, you know, why this is open to debate, but I think this is -- and this isn't a pattern that's true just about Washington, this is a pattern that's true more generally.

And in this picture I'm reiterating the fact that most housing growth is in the exurbs, and so these bars are showing you tens of thousands of new housing units by jurisdiction. And I want to point out that in the exurbs most of that housing growth, with some exceptions, but most of that housing growth is single-family.

In the urban areas at the top, in dark blue, you know, we're talking about, for the most part, less than a quarter of new units being single family units, and the suburban areas are somewhere in between those exurban and urban numbers.

In chapter three we ask how housing costs compared to incomes and, you know, the bottom line as any Washington area residents know is that housing is expensive. So, this graph is telling you that the average homeowner in Washington D.C. owns a home that is about six times his or her median -- his or her household income.

And you can see that these numbers are highest for the urban jurisdictions,
and then there's a mix across the suburban and exurban jurisdictions. But anyway you want to look at it in any jurisdiction in the Washington region, housing is expensive.

This national number for the home -- the home price to income ratio was somewhere around 3, and in the D.C. area at somewhere about 5.

This picture shows you an analogous figure for renters. It's looking at the gross rent divided by renter income. So in some jurisdictions, and particularly the exurban ones, we see that renters are paying above 30 percent of household income towards rent. Interestingly, those figures are not highest in the urban areas.

So here's the bottom line, what to take from all these charts. First, roughly half of the housing growth since 2000, in the Washington area was exurban, and half of that was in Loudoun and Prince William Counties.

And as you've seen single-family construction has dominated since 2000, and single-family construction comes with -- when we construct single-family housing that's a decision that persists for probably at least half a century if not longer, with implications for land-use patterns and for transit.

And house price gains have also outpaced income gains. So in the Washington area most residents live in jurisdictions where they're paying about five times their household income for a house, as it compared to the rest, the U.S. average where residents are paying about three-and-half times.

So, after that maybe not so uplifting news, I'm going to -- you can look in our report to make a comparison of your jurisdiction with other jurisdictions.

So, what we do in the report, which I don't do here, is show you demographic and housing characteristics by jurisdiction, but here's an example. So, on the left you have Washington, D.C., and showing you the number of units by structure type in 2017, and on the right you have Loudoun County.

So, you can see that in Loudoun County roughly more than three-quarters of units are single-family, in D.C. that number is under one-half, and that in D.C. there are a
number of large multi-family structures with 50 or more units, and in Loudoun County there are not so many of them.

In the report, we have analogous figures for race, for income, and for other demographic features. So looking forward we put out this report to say that local decisions about housing development have cumulative regional consequences, and we'd like to help policymakers think about those consequences, you know, in a regional framework.

And the decisions we have currently made about development predict increasing demand on driving infrastructure, you know, with long -- with long run costs. And furthermore, limited growth in the region's housing stock is a challenge to regional economic growth.

So, you know, our charge going forward is to think about ways that we can expand the housing stock to provide housing for people of -- across the entire income distribution, in a way that is equitable and financially feasible.

And I also want to say we anticipate this being an annual report, this is the 2019 State of the Capital Region. We hope to be back next year with the 2020 State of the Capital Region, to which you are all warmly invited.

And you can find us online, the full report is online both at the Center for Washington Area Studies' webpage, and at the Brookings' webpage.

So, thank you all. (Applause)

MR. McCabe: If I stand on this I'll be extremely tall, so I'll stand slightly to side here. We'll take it away. (Laughter)

Thanks, Leah. It's my pleasure to introduce our panel for this afternoon. We have a great Moderator, and three guests invited for today's panel. So their bios are in the information you have, so I'll just give a quick introduction, and then invite them up to the stage.

Our first panelist is A.J. Jackson. A.J. Jackson is currently the Executive Vice President for Social Impact and Investing at JGB Smith which, as I'm sure many of you
know, JBG owns, operates and develops housing throughout the Capital Region. He was previously a partner at EYA which was a real estate development firm based here in D.C.

Our second panelist is Sarah Coyle Etro. Sarah is the Assistant Director of Family Services for Loudoun County, as Leah said, Loudoun County is a bit of an outlier in some of the work that we’ve done, so we’re excited to hear Sarah share with us more about the experience in Loudoun County. Sarah has been with the County for about 30 years, and oversees the Department whose mission includes both housing and community development, assisting residents in finding affordable development. So, she has a background in planning and housing that she’ll share with us.

And Andrew Jakabovics is the Vice President for Policy Development at Enterprise Community Partners. Again, I'm sure many of, you know, Enterprise is a national nonprofit working on affordable housing and communities throughout the United States. Before arriving at Enterprise Andrew worked at HUD as a Policy Advisor in PD&R, Policy Development and Research there, and before that at the Center for American Progress.

And our panel today will be -- will be moderated by Ally Schweitzer who -- I keep saying as you know -- because I'm sure you all know, covers Business Development and Economic Issues for WAMU, including housing market issues and issues of affordable housing.

So, without further ado, I will invite our panelists up to their chairs.

MS. SCHWEITZER: Hi, there. Wow. This is a packed house. I'm so happy to see it. I'm Ally Schweitzer. I'm a reporter with WAMU 88.5. As was already mentioned, I cover business and development and econ-related issues for the NPR Affiliate in town.

I am so thrilled to be here. Especially after I saw the RSVP list, because there are some very, very smart and informed people who know a lot more about affordable housing than I do, who I'm sure will be quick to fact-check me on any mistakes that I may make in the course of this panel. So I'm happy to be here in front of his esteemed crowd.
And Brian already took care of the introduction. So, do you know what? I'm just going to start this off.

I want to I want to throw this out to AJ, because I know you love talking about supply in our conversations before. So, now that we are armed with this knowledge that Leah has presented about the current state of housing, the housing supply in the region, talk about the relationship between supply and affordability.

MR. JACKSON: Thanks Ally. It's a pleasure to be here at Brookings. Yeah I do like to talk about supply, because I think there's a strong link between supply and affordability. It's not everything, I want to be clear about that upfront, it's not everything, and it doesn't solve all the issues related to housing affordability in our region, but the fact is when you see the income graph, and you see the price graph, a lot of that is due to not producing housing in line with the job creation that's going on in our region.

And that's a relatively recent trend, we used to do more of that, sort of pre-2000, we used to be more in line between jobs and housing, we've gotten out of balance, and that being out of -- primarily out of balance by not producing enough housing.

And that lack of production coupled with changing demand about where people want to be, has put some real pressures, particularly in those dark blue and light blue areas. And even in the urban parts of the more suburban areas, like Reston Town Center has put some pressure on pricing.

And that has all sorts of implications. It is an economic growth issue for the region. I think it is a challenge for attracting and retaining employers and talent in the region. It's also an issue for all of us. It's one of the reasons that we have the longest and most expensive commute in the nation.

It's one of the reasons that we have net domestic out migration, that we have more people leaving the region to other parts of the U.S. than coming to this region from other parts of the U.S. in the last year. And there's a real downward social pressures as well.
There's some research that I know some former colleagues of Jenny's did up at NYU, from the Furman Center, that talks about the relationship between supply and affordability. And there's a real downward pressure as there is more demand from higher income people for apartments in houses, in closer-end locations that pushes them into older housing stock, if we're not building enough new housing stock.

And that pushes out people who can only afford to be in lower quality, lower price point housing stock. And so that creates housing stressors, transportation stressors, and ultimately there's been some research recently talking about the inflection point between affordability and homelessness. So I think there's a real link, and it's a serious issue.

MS. SCHWEITZER: Let's also get a little bit deeper into the why behind the supply shortage. And I'm going to throw this out to the entire panel here. Anybody who wants to take this up? I mean there are so many factors that play into the current situation that we have now. Andrew, how about we start with you?

MR. JAKABOVICS: Sure.

MS. SCHWEITZER: Any theories?

MR. JAKABOVICS: Theories, lots of theories, some evidence for each of them too. So, yeah, I mean I think that it's hard to build, there's obviously a lot of local engagement in the development process, and the ability for communities to weigh heavily on what comes out of the ground, and then the decisions that people are able to make in terms of what they're going to build.

You know, the ability to develop high density housing by right in this metro area is then --

MS. SCHWEITZER: For anyone who doesn't know, define by right, please?

MR. JAKABOVICS: Any of these types of things. Right, so zoning is sort of the driver of the way in which land gets used, and sort of under existing zoning restrictions, well the whole -- basically the entire -- every county is pretty much plotted out, with certain uses allowed in certain parts of each county.
The degree to which a property may be developed under the, sort of, standard plan that already exists without going back to the community, without going back to the county for a variance on that is considered to be able to be built by right.

There's a lot of land that zone single family. It's very hard to build things other than a single-family home on a lot that is zoned for single family in most places. And certainly when you get into more dense communities and there are also tight restrictions, and there are other factors that impinge on the ability to develop as densely as the market itself might seek to build.

So close in places we see that with the Silver Line we see it with the Purple Line. Those are some of our best test cases for what would optimally come out of the ground potentially being frustrated by what's allowed to get built, sort of, by right again. So that's a big piece of it.

And then, sort of, overlaying the desire for home ownership, the desire by local budgetary authorities, to make sure that the taxes that are generated by any particular property more than cover their own cost, is not an insignificant factor when you then think about the ability to build apartments which are generally considered to be more expensive in terms of their use of services than single-family homes on a per-square-foot basis.

So there are a lot of drivers of why there -- we don't see the density that we might otherwise want to see constructed, and then beyond that just -- and this is sort of a global problem, or a national problem.

The construction labor itself, so materials have gotten more expensive, the residential construction labor supply, is not what it had been even at the peak before the crash, and so our ability to produce enough housing, getting back to AJ's point, is also more constrained.

And so if you're going to build, you're going to start at the top, and that's another factor that weighs heavily on the ability to produce units not just at the top of the price point, whether that's within sort of the homeownership space, or even in the rental
space. But it definitely impacts our ability to produce enough housing and then the sort of relatively limited supply that is being produced, is being produced at the high end.

There's a Zillow study that looked and so the -- sort of, they break the housing market into sort of thirds, and this is on the rental side, but 56 percent of new construction D.C. Metro area is targeted at the high end.

And prices at the high end on average, according the Zillow study is about $3,300 a month, on average. The bottom third that index only 13 percent of new construction met that criteria, and the prices there are half of what they are at the high end.

So again, kind of, the ability to sort of build today for affordability tomorrow is also called into question when we're producing, sort of, a lot of luxury housing and not enough, sort of, workforce. When you then also overlay, you know, the fact that, you know; the D.C. area in general, right, house prices are five times incomes for home ownership.

It means a lot of people who in other markets would be homeowners are now renting. And AJ sort of touched on this as well. So, if you've got the highest income folks potentially renting longer and in more desirable locations, it pushes lower-income people out to the peripheries, which is one of the things that we saw why the rent burdens are high, even in exurban counties.

But even close in, you know, you do see some sort of inter-county swapping in terms of locations, and access to jobs, and things like that, but at the end of the day rent burdens are sort of high across the board.

And it's true not only for households that we typically think of being more susceptible to being a cost burden, so these are people paying more than 30 percent of their income on rents, but even folks, who, in sort of most other places would be able to find a place that's affordable, that meets their both quality and locational needs.

In the D.C. area we see it's not uncommon for people earning between 80 and 120 percent of area median, which is sort of the heart of the rental market in most places, who are also paying more than 30 percent of their --
MS. SCHWEITZER: So, this is maybe at a smaller scale but -- I'm sorry, Sarah, you did you want to add something to that? Okay, because I have a -- you're up next, by the way. But I want to throw this out too, I mean we hear a lot in -- you know, I'm in local media and this is something that we cover every so often, but there's also a lot of, you know, resistance to development.

And that seems to be kind of a choke point for development now. And AJ, because you work for a developer this is something you know quite intimately. Overall, I mean, how much of a factor is local resistance to development in this supply problem?

MR. JACKSON: I think it's a significant issue. I mean I think it drives that sentiment, you know, something that politicians respond to, and so it drives land use policy to sort of the point earlier which reduces density above levels that would otherwise be able to be obtained. I think that's a part of it.

There's also, you know, we are talking about cost and all -- in the storage of labor, there's also a significant upfront cost in the land use and entitlement process in this region. And it's pretty much the same no matter what you're building. It's going to take you two years, and it's going to cost you 2.5 or $3 million to get through an entitlement process.

And so that, just like high labor costs, and high land costs, there's high soft costs, which are the riskiest dollars that -- it's all equity, and it's the riskiest and the most expensive money to raise, you're going to push to things where there's more margin and greater return.

And so it pushes the development towards the higher end of the market. And if there's not adequate supply, there's not adequate sort of a land use base to build workforce housing and luxury housing, then let's just build the luxury housing, because at least then there's more down tide protection, if things go we'll make -- you know, it'll be more profitable. And so it's an issue.

MS. SCHWEITZER: Do you think that there is a -- I mean clearly there's a very broad perception that construction of luxury homes, especially in urban areas, drive
gentrification, right, and so that is at the root of what is a lot of local opposition to
development.

Can you talk a little bit about the relationship between that luxury sector, the
kinds of these expensive apartments that we're seeing built constantly in the district, the
relationship between that and displacement? Because I think that there's a very -- there
might be a disconnect between people in the industry who are seeing it from their side, and
people who have already seen how it impacts their neighborhoods?

MR. JACKSON: Yeah I think -- that's a good question. I think that the core
of the issue, as I've experienced it, that just as a practitioner, is that we are not talking about
the same thing, right.

When developers are talking about displacement, they're talking about: how
many people who lived in this neighborhood have I pushed out of this neighborhood with the
project that I'm building? And if I'm building on a parking lot, or an old dry cleaner, then who
have I displaced? There's no one there.

When residents are talking about displacements they're talking about how
come my neighborhood doesn't feel like my neighborhood anymore? Why is the character
of the place that has been my home not the same character? Why are the amenities, that
we called the amenities, the stores, the retail that you're bringing to the neighborhood, why
is it not the type of retail that I wanted there?

Or, in a very real sense, why is it that the local business that's been here,
you know, for 30 years, is now not staying, because they're not paying the same rent as, you
know, the boutique fitness, or the boutique ice-cream, or the whatever, that you've put in the
building -- in the basement of your, or the ground floor of your boutique building?

So I think that's really the core of the gentrification issue, as I see it. Is that
they were really not talking about the same things. I'm not saying that there is no housing
displacement, that's not what I'm saying at all, but that most of what we experience in the
development process is people reacting to a loss of control, and a change in the place that
it's their home.

And so if -- and developers are not really equipped to address that, you know, that's not something that is taught in the planning school or in business school. And so I think, until we can talk through those things and talk about how what you bring into a neighborhood is actually a bigger tax base, more amenities, improvements, and it is a equitable development where there's benefit for all, then I think it's -- you know, we're going to continue to have that.

MS. SCHWEITZER: But at the same time D.C. -- where there was just this study that came out about this recently, and of course I can't remember the organization that did it, somebody in the audience might know. I even reported on it, but I can't remember.

But it indicated that D.C., that in many parts of the country when you have -- when you have an increase in housing costs, there's not necessarily that related phenomenon of displacement at the same level that you see in D.C., D.C. has an alarmingly high level of displacement. So why is that why is that -- why is that happening?

MR. JACKSON: I think it goes back to the -- so this goes all the way back to the supply issue. I think it's because despite all the cranes that you see in the air what the study is showing you is that you're not producing housing sufficient for the demand in the places where people want it.

And so because the displacement is not -- again not tearing down apartment buildings and replacing them with, you know, with luxury condos, what the displacement is, is new income coming into areas and pushing out renters, primarily, in single-family rental housing, because people are going into that housing who have more money. And then those folks are pushed either into the exurban counties, or completely out of -- you know, completely out of the region. I think it does move back to the supply issue.

MS. SCHWEITZER: Well, let's talk about the exurbs. Sarah? And that's where you come in. Let's talk about the total aberration that is Loudoun County and what we're seeing happening there, which is between 2000 and 2017 PERLEA's Research is,
you're seeing this near doubling of the housing supply in Loudoun. What is going on in Loudoun?

MS. COYLE ETRO: Well, I would say we are off the charts, and we are exceptional, but I think it's pretty simple in terms of what we're seeing in Loudoun. And that is over the last 15 years of the study timeframe, is that we've had a lot of green fields development.

So we have large -- have had large tracts of land that are available, and we've planned for planned communities, so it's been the process and the promise, unlike the already platted lots that Andrew talked about is to go through a rezoning process.

Now, what we've planned for has been a suburban pattern, it's been at about four units to the acre in a mixed -- mixed-use plan development pattern. Because we do get into some conflicts with new development coming on, the density has stayed low. So, it's a fairly suburban pattern in Loudoun.

However, I would say that we've kind of reached the end of -- in terms of from a policy perspective with what is available for large-scale rezoning, and we're going through a planning process right now, to promote kind of a second wave of development, which is higher densities. We will have the benefit of two metro stations, so planning very high densities around our transit is all in process.

MS. SCHWEITZER: Interesting, because the thing I wanted to ask you to do also is characterize what type of new housing we're seeing, is it the vast majority is single-family?

MS. COYLE ETRO: Yes. No question about it. And I think one thing the study does show is that, believe it or not, when you compare Loudoun to farther -- two jurisdictions closer into D.C., it is more affordable, and so it has been an attractor to families, and to larger families.

In the last 15 years we've seen our family size grow to almost four people per household. So it has been a place of families and the desire for single family, which the
study identifies single family as townhouses and detached.

And of course there's most households in Loudoun are homeowners, so all of those factors I think have helped attract the kind of development, and promote it, and afford it. Now, that's not to say we don't have an affordability problem, but it's -- you know, we've got great schools, we have access to jobs farther east, and we are building our own employment in Loudoun.

We've moved from about 50 percent of Loudoun jobs being held by Loudoun residents up to 56 percent so we are moving in the right direction as far as that goes. But I don't think that's a phenomenon for just Loudoun, I think when you look at the region as employment and activity centers move out, there's more opportunity for people to live in the exurbs and access higher-paying jobs.

MS. SCHWEITZER: So depending on the audience that you're -- that you're entertaining the term "single family" can be a dirty word? When we're talking about an urban setting, for example, or an increasingly urban setting, looking at, you know, Fairfax. Single families is generally viewed as the least helpful form of housing when it comes to achieving affordability, right?

Because it's the most expensive form of housing to build, and over time, you know, you can have significant issues with, you know, maintaining affordability of single family, although you might have something to say about that that counters what I just said.

So what does the long term look like if, with all this new single-family housing in Loudoun County, is that sustainable over time? And you just mentioned a second wave that we might be looking at in terms of denser housing, but single-family comes with issues such as sprawl, long commutes and high costs. So, is that -- is this the right direction that Loudoun County has been heading in:

MS. COYLE ETRO: Well, and you know, as I said, I think we've achieved the first wave. We have an urban growth boundary beyond which higher densities are not planned, but we recognize that we have a mismatch. So we have large homes, many
bedrooms, but what we're seeing are smaller households, and also the need to provide for some smaller unit types the missing middle, and higher density.

So what we are planning for now, and our Board of Supervisors is considering this plan over the next couple of months, and we'll make a determination as to what they want to do, but it's to add more mixed-use, higher densities in our suburban area.

So, I think some of the issues with maybe some of the NIMBY battles that we haven't seen fought may come in as we start offering more opportunities for higher density residential in this -- in our suburban area, which is the eastern part of the county.

MS. SCHWEITZER: And that was -- I was going to ask, I mean, do you -- as the, for example, the Silver Line expands, are you thinking -- if you had a crystal ball -- are you thinking that we are going to start seeing some pretty knock-down, drag-out fights over density, dense development in Loudoun?

MS. COYLE ETRO: Again, I think if you look at the land and what's there, you know, we have the benefit of not -- we may have some entitlements on the ground, but we don't have construction on the ground around our Transit Center, so there are opportunities there without a lot of closed in residential development. So we still have -- we are different I think, and we are on the edge, so I don't -- we don't have a lot of the same issues.

MS. SCHWEITZER: Give it 20 years.

MS. COYLE ETRO: Yes.

MS. SCHWEITZER: Ten years.

MS. COYLE ETRO: And I think so, I think that's right. Yes.

MS. SCHWEITZER: So I'm going to -- I'm going to pivot now because I really want to talk about low-income housing in particular, and where this all fits in. And Andrew, I'm looking at you, because as I learned in the green room, you're an expert on this encyclopedic source on low income, the low-income issue.

Because we hear, you know, I talk to a lot of economists, I talk to a lot of
smart growthers, and I talk to a lot of developers, for whom it seems that supply is the answer to everything, right. Building more housing will solve the affordability issue. And I've come to believe that is maybe not true, and I wanted to ask you about how -- is adding supply the best solution for this particular band of low-income housing that we know is in short supply?

MR. JAKABOVICS: So I think the question is: at what price point are you providing it? If it doesn't exist to be occupied, then it doesn't help anybody, but just building at the high end we know that it's less likely to filter down, which is sort of the economics term for becoming more affordable as it gets older, to become affordable.

And so I think, you know, again the gap between what's getting built today purely in the market space, and what would be considered affordable to most households, that gap is wide, and it's not clear that even over time it's going to close.

So, yes, new supply is critical, but just asking the market to provide it without also either requiring a few things like inclusionary zoning in which a certain percentage of units of any size development also has to set aside certain percentage to be affordable at or below a certain income level.

Or, units that are built explicitly for affordability such as through the low-Income Housing Tax Credit are really critical. So, we are adding kind of the pure market space, such as the extent that any development that happens in the "pure market" given it all the regulation involved.

But that we are also building dedicated affordable units as we are adding to that -- part of the apply as well -- so that down the road when some of the newly built units become older units, and might become a little bit more affordable, they're adding to already a strong base of affordability.

We are not -- we can't build our way out of the affordability challenges alone, in part, if you just sort of do the back-of-the-envelope math about what it takes to keep a unit from just being habitable, right?
It costs about $6,000 a year in operating costs and like, setting aside any cost for, you know, paying the mortgage for it, and things like that.

So, you know, in a sort of profit-free environment, right, if you can't spend $6,000 just to keep the unit habitable, if your income doesn't support that, so you're really talking about somewhere between, you know, what's called 18- to $20,000 a year in income, anybody below that is not going to be able to afford even an adequate unit.

And so that, first and foremost, are going to be in the households where some degree of subsidy, whether that's the subsidy to the occupant in the form of a housing voucher, or whether it's a subsidy to the landlord in the case of project-based vouchers, or through the tax code, like the Low-Income Housing Tax Credit.

If you're not setting aside units for affordability on day one, it's very hard to get and keep those units affordable. So supply is part of the solution, I think there's a tremendous demand side as well, right, in some -- in some cases D.C. Metro not necessarily being one of them.

In some places housing affordability is purely an income question; right. Rents by sort of sticker price alone would be considered affordable. Again, not the case necessarily here, but where incomes are too low to support even sort of those modest rents, right, it's an affordability problem but the solution is going to look different.

But in the D.C. area there are definitely folks for whom rising incomes would be helpful, but beyond that we also need to be producing property -- units again, alone, in other words like in a sort of in a mixed-income building, or in a building that's entirely affordable, but we need to be producing affordable units today, in addition to making sure that we're producing for the market writ large.

MS. SCHWEITZER: Sarah?

MS. COYLE ETRO: Yeah. I just wanted to add. So, the bulk of our housing has been built since 1990. And our Board had the foresight to adopt an Inclusionary Zoning Ordinance, so we've been able to capture through the zoning process
affordability in those homes that have been built.

We've been recrafting that program now as we are getting to kind of at the end of rezoning activity in the county, to be able to capture some of the sale price from those affordable units, and loaning the money back out for low-income housing tax credit projects. So we've been able to develop some affordability through that program, and now we're using it to add that next layer, in kind of in the next wave of development that I described, and we are getting some higher densities in.

MS. SCHWEITZER: So, essentially there's a band, there's an income band where it's folks who are earning very low incomes, and where you're always going to have to have some degree of subsidy, right, it cannot -- it's a problem that cannot -- and either cannot be met with market supply alone. Right?

So, can you just -- but we also know that, for example, you know, you and I talked about this offline, public housing used to be the Federal Government's default solution to that problem. Now, we are in a situation where the Federal Government has spent decades divesting from public housing. Right?

We have a public housing crisis here in the city. So, can you talk about what -- you know, how is this extremely -- and you've touched on this -- but how is this extremely low-income band being served currently? You know, by local governments or by the Federal Government?

MR. JAKABOVICS: So, there's a mix of programs so, you know, it's going be first and foremost folks, I think, are probably most aware of the housing voucher programs, the Section 8 Vouchers that they're sort of typically referred to, which get applied either to individual households, and take the -- and then take those vouchers and sort of go anywhere where the rent that they're allowed to pay is sort of up to -- meets a statutory level.

Or below, and then they pay 30 percent of their income and the government makes up the rest. Or, in some cases, those same vouchers are project-based, but from a production perspective there's also the low-income housing tax credit, which uses tax credits
that the developers get, they have to set aside units that are affordable, the properties have to be affordable, sort of 60 percent of area median income and below, recently through the last tax code change.

Now, as high as 80 percent, but on average they still have to meet incomes at 60 percent and below, so it's what's called income mixing. So, if you go above 60, you also have to set aside units below 60, so you're at or below 60. But the way in which those credits get allocated at the state level is through a program called the Qualified Allocation Process.

And those QAPs, Qualified Allocation Process, QAP, so the way the QAP sort of prioritizes the limited number of credits often gives extra points or incentives for deep affordability, so the ability to serve households at or below 30 percent of area median, in particular, set aside for 50 percent, and the like.

So, you often get sort of entirely affordable buildings. That way, but the occupants are then -- have to pay the rent based on their own incomes. They're not necessarily getting additional assistance although in some cases people are taking their housing vouchers, and coming to properties that have been built with the low-income housing tax credit.

Unfortunately, the cost of the credits, given construction costs and all of the various things we've already talked about, what makes -- what drives the cost of development for market-rate properties applies in spades to affordable properties; right.

Community opposition doesn't just exist for market rate dense development, it's pretty pervasive, particularly for affordable housing. Even though there's actually very good, evidence that shows that low-income housing tax credit development has positive impacts on nearby property values.

So, take that for what you will. It's not entirely always an economic argument. And we'll leave it at that for the moment. We can come back to it.

But the idea is that in theory -- or back in the day the cost of the credit would
cover the development costs, because the developers are often nonprofits, but occasionally for profits, would then sort of sell those tax credits which are valuable, because you're getting a credit against your federal taxes -- for corporate taxes I should say -- and then by selling those credits you now have cash on hand to begin to do the development.

More often than not, now the cost of development far outweighs the value that you can extract from the credits, and as a result you need to fill in the gap somehow. So, that can be potentially through a mortgage on the property, but again because of the rents tend to be low it -- the debt service that you can get from a bank to cover from the rents, is not going to be enough to cover the whole for the development costs.

And so you need to turn to other sources of financing. There's actually been a commitment in the D.C. area, and AJ can talk to this a bit, I think, to basically bring in new public-private revenues to help fill those gaps.

So, there are local trust funds in a lot of the jurisdictions here that help cover the cost of the development, so that way the development can actually happen, is sort of -- in a lot of cases the availability of trust fund dollars, whether it's through the Federal Trust Fund, the National Housing Trust Fund, or state and local funds. It's a go/no-go decision.

Because if that money, that basically what's called the gap financing, isn't available somehow, whether it's a trust fund, home dollars, CDBG dollars, some HUD programs can help fill the gap as well. But unless there's a way to fill that gap you don't see that development taking place.

MS. SCHWEITZER: AJ, you look you've got something to say.

MR. JACKSON: I think there's a really important point here that I want to just highlight a little bit, which is I always think about this, and I've said this before, that there is -- there is a supply side issue, there's also an income issue; right. And so we focus, what I do I focus a lot on workforce housing, and there it is -- and in my view largely a supply-side issue.

You have people who make enough money that could pay rents, that would
support the operation and maintenance, most important of a property and profit, but we're not producing housing in and income band for the reasons that we described earlier.

So we have a financing mechanism to help preserve, work force housing. On the low income side it's an income issue; right? So you have to have production of the housing, I completely agree with everything Andrew said.

But even if you produce, can get the subsidy dollars, the low-income housing tax credit, the Housing Production Trust Fund, all of that to create the units at very low incomes, the fact remains that you have people who are paying rents that don't really cover the cost of operating and maintaining a property.

You have, in my view, a financially unstable building sort of from day one with the program. And that's not a knock WATA program, because it's the best thing that we have going to create low-income housing, but it is a knock on just like many other things in the country, where we don't fund the ongoing operation of the infrastructure.

And so what you end up with is properties that deteriorate over time, and more important nonprofit owners that are in financially unstable positions that are constantly trying to refresh the LIHTC ground, the low-income housing tax credit ground, to make the capital improvements because you're not generating enough revenue, you just can't do it on people.

I mean you should come manage property for us if you can do it for 6,000 a unit a year, that's great pricing in this market. And they're not generating enough rent just -- you know, to run the building. So there are two sides to the issue, and I don't think we've really figured out, other than through vouchers, how to address the second side, which is, once I've given you the money to build the building, how do you keep the building going on an ongoing basis, at that lower income level?

We think we have a way to do it at the workforce level, and our hope is in our model, that we can, through a mixed-income model, bring some market-rate residents in who essentially cross subsidize lower income residents in that building, so you end up with a
mixed-income building. But to do that strictly low-income building is very, very challenging.

MS. SCHWEITZER: So, we have about ten minutes left before I open it up to audience discussion. I want to talk -- just ask you very quickly, because you mentioned workforce housing. This is something that is -- too many -- I think that there's -- it's not something as I learned when I was reporting on the Mayor's Workforce Housing Initiative, it's not something that is very widely understood. Right?

So when we talk about workforce housing, and the initiative that you are a part of the Washington Housing Initiative that specifically addresses that band of housing, what are we talking about? What is workforce housing?

MR. JACKSON: so, in simple terms the way I think about it is, what we're talking about is people who make too much to qualify generally for the subsidy programs, Andrew was just talking about, and too little to be well housed or well located in the market. And so to get wonky, sort of above 60 and to 100 or 120% of AMI, so people, depending on the household size --

MS. SCHWEITZER: Wait could you -- before you get into that, could you define what that means in terms of income, locally? Yeah.

MR. JACKSON: Right. So I would say, so basically people earning between, call it $50,000 and $125,000, $130,000, depending on the size of their household and where they are, you're making too much money, again, depending on your household size, for most of the programs that exist out there to help people with housing, you're making too little money to be well housed or well located.

And so that's a group though that is making enough money to pay a rent that allows someone to operate a property effectively for the long term, and deliver a return to an investor.

And so we've created a structure, which involves both an investment vehicle, and nonprofit ownership to allow -- to really to go out and buy the naturally occurring affordable housing that exists in this marketplace, and preserve the affordability for that
workforce band over the -- over the long term.

So that's what we are talking about, but if you look at what's happened regionally with population, we are growing like weeds with people earning $150,000 a year or more. And we are also seeing a surge in people earning $50,000, a year or less.

This region is actually losing people in that middle band between the low income and the very high income, and that has huge economic, social, equity issues that we need to -- we need to try to address. So that was the genesis of the initiative.

MS. SCHWEITZER: And as we know of course the mayor, Mayor Bowser in D.C. wanted to create a workforce housing fund of $20 million, that would be leveraged, that is now dead. The D.C. Council got rid of it in the budget process, now we're looking at something very different entirely. It also has -- it's also the whole idea of funding middle-class housing is also kind of controversial when we have this crisis on the bottom end of the spectrum; right. So you understand why this is kind of a tough sell, right?

MR. JACKSON: Yeah. Absolutely. And it is definitely controversial, it has been. I mean when I worked in my first workforce housing project probably 10 or 12 years ago, at that time it was not only controversial, but no one really understood why there was even a need for this

I think people hear, just in their conversation community, now they understand the need a little bit more. It is a tough sell because it's presented as an either/or. It's not an either/or, and we're not in a position where we can do either/or, we have to do both.

There is no argument that there has to be subsidy for low-income people, let me make sure that's -- of course there's no argument that there has to be subsidy for low-income people. There's no other way to do it, there's no economic model for doing it, but we also have to address the middle.

If we have a region, cities, places, where people are fleeing because they can't find housing, or they don't want to commute five hours, then we will choke the goose.
Okay, we will choke the goose.

And so there has to be a middle. It's good for social stability, it's good for showing a rung on the ladder up in terms of economic mobility, and it's good for economic growth. So you have to do both. And I think, unfortunately, it's become a bit of an either/or discussion because the resources are scarce.

MS. SCHWEITZER: Sarah?

MS. COYLE ETRO: I just want to add one thing. So, I am not arguing your point, but I would say that a large number of people that are in low-income housing tax credit apartments and earn incomes below 60 percent are in the workforce. So, I think it's kind of a misnomer to suggest, and I think there's a problem with that, to say that its workforce housing, and then it's low-income housing when a huge number of people who need subsidized housing are essential to the workforce.

MR. JACKSON: I completely agree. I think one of the unfortunate realities is that because of the programs that exist around, you know, with sort of legal definitions around low income, and moderate income, and what is committed affordable housing, we have to find a way to define this band, but I completely agree.

Because the workforce goes, basically, from one to infinity, right, anyone who's working is in the workforce, so I agree that we need to find a better way to define that middle, but we're probably (crosstalk).

MS. COYLE ETRO: And I know affordable doesn't work well, but if we think of affordable very broadly, to try -- to try to provide a continuum of housing.

MS. SCHWEITZER: Mm-hmm. So we only have about, let me see, four-and-a-half minutes left. This the time where I want you guys to throw out some radical policy proposals for increasing housing supply where it's most needed, and achieving affordability? So, who wants to start? Sarah? I'm going to put you on the spot.

MS. COYLE ETRO: Well, in thinking about that question, you know, one way Loudoun has been able to sustain the growth, is by being very careful in terms of
planning but also looking at the fiscal implications, and being able to ensure that we have a balance, fiscally, in the county. So my thought would be, you know, we do capital facilities planning, one thing that has hurt our affordability is impact fees on new development, and which raises the price of a home. But just in thinking about how we have approached trying to be able to, you know, support the development and keep taxes low, and so forth, I was thinking perhaps housing becomes one of our capital improvement program.

MS. SCHWEITZER: What a radical concept.

MS. COYLE ETRO: I don’t know if it’s radical, but we need it and it’s important to our economy that, you know, essential workers have a place to live, and so why not plan for it as we would plan for a road, or plan for a community center, or plan for a library.

MS. SCHWEITZER: Andrew, it’s your turn.

MR. JAKABOVICS: Ah. Where to start?

MS. SCHWEITZER: Well, you only have three minutes, so keep it quick.

MR. JAKABOVICS: Okay. So, I’ll keep it quick. So, I think that thinking about kind of density, and the need for density, one of the things that we’ve been spending a lot of time doing is trying to figure out how to remove the land cost from the equation of development. And so thinking about ways in which there are underutilized parcels.

So like some of the easiest lifts are properties that are already under public control particularly, you know, things like pad sites around construction for the Metro, for the Silver Line, Purple Line, et cetera. But expanding beyond that to, you know, underutilized parcels, by school districts, universities, you know, VFW posts, hospitals, you know, there’s greater density that could be identified in non-residential places, but are sort of adjacent to community assets.

And if you can figure out how to unlock those properties, you know, sort of the whole host of ways you could potentially do it, but if you can get access to that land at low or no-cost it can remove, you know, potentially, significant cost component of
development overall.

So, doing more of that and thinking about ways, again, to sort of streamline the development process, so there's less risk involved, less uncertainty, I think would potentially go a long way to adding supply in places that people want to be. And I think that would be really critical.

MS. SCHWEITZER: AJ, you're last?

MR. JACKSON: I'd like to see a truly regional approach to planning for housing. I'd like the idea of housing as infrastructure. I think that's important. So planning for housing and to funding affordable housing, it's not, you know, that people don't respect the jurisdictional boundaries when they're thinking about where to live or even where to work, and so we have to look at this issue regionally, much like transit, and take -- set regional goals with actual contribution limits by the sub-jurisdictions, and to have a regional approach to funding affordable housing.

MS. SCHWEITZER: Wow. We're ahead of time. Okay. So, I'm going to open it up now to audience Q&A; we have somebody who is going to go around on the mic. I see a lot of hands. Let's see. Let's go to this gentleman, right here.

QUESTIONER: Thanks for a fascinating presentation. I'm a Washington native and lived here, and bought an old house and then sold that and actually built a house, and one of the things that had struck me has been the archaicness of the construction industry. While there's a lot of modernization in terms of components and things, but a lot of the stuff that has to do with supply construction seems to me it has to do with the cost of construction.

What can regional governments, regional coordinated efforts do to incentivize a move towards factory-built housing, modular housing, all these things that have had stigmas attached to them that could be incentivized and improved with certain incentives, if you will? Thank you.

MS. SCHWEITZER: Anybody?
MR. JAKABOVICS: Yeah. I'll take that. Yeah, we are actually working on a paper on this at the moment actually, in trying to figure out how do you scale offsite construction processes for putting -- for multifamily in particular, and some of the barriers have to do with both finance, as well as zoning, as well as code compliance, right.

So every jurisdiction has its own set of codes, and even in places where that's not actually as fragmented as D.C., and D.C. is not particularly fragmented as far as these things go, you know, like a place like New Jersey which has, you know, 100-and-something municipalities.

But, you know, anytime you're producing units offsite you need to both check the quality of the work, both at the factory, when it leaves the factory as well as when it arrives on the site, there are transportation costs, and so the need to kind of coordinate with local DOT, staging sites, and things like that.

It's a little more complicated, and it's not the routine construction process. And so I think getting greater familiarity with it will be helpful, but it's -- again, I think it comes and goes in waves as the need to kind of control costs comes into play.

But I do think that given sort of technological advances we are now at a point where it seems to -- there seem to be in certain circumstances, particularly in high-cost markets, significant cost -- when I say significant-- within, you know, sort of probably 5 percent, which is not in significant, cost savings for offsite sort of panelized or modular construction where you, sort of, do most of the construction offsite, bring it onsite and then finish it onsite, bring the siding, and stuff like that.

So there is still some local construction. Some of it has to do with labor, right, like who's doing the work where? Some of it still has to, a matter of getting it through, you know, a local approvals process, and it's one of these things where, again, kind of the predevelopment stuff is the hardest and most expensive, and the highest risk, and if it hasn't been done, and the planning Board has never seen it before, and the code folks have never seen it before, getting through that --
Like, the cost of doing it, and the uncertainty may or may not make it economically viable to do it, as opposed to we are just going to do the same thing we've been doing for the last hundred years, or so.

MS. SCHWEITZER: Let's see. This gentleman right here in the taupe shirt.

QUESTIONER: Thank you very much. I'm (Inaudible) Internationally Urban Alliance. Talking about ideas, can we get inspiration from other cities in Europe, Asia, and why not New York City? Think about Mayor Bloomberg's.


MR. JAKABOVICS: Sure, I mean I think folks have been looking around. And I think, and getting back to kind of what you can do within code and things like that, right, so they're definitely places that are going stick-built higher, right, or doing stick-built over podium; right.

So you're starting to see, kind of, cost engineering in a lot of different ways but, again, you can save cost, but if the sort of supply isn't there, it means I can just make more, I can raise my profit margins. So, even the opportunity to lower costs is great, but it doesn't like translate into lower cost at the end of the day until we reach kind of more of an equilibrium within the market.

So, yes, I think we can -- I think folks are starting to look not only outside of the D.C. area but, you know, even overseas for best practices, but how we bring them to bear here I think is still very much an open question.

MS. SCHWEITZER: Great. So, we have somebody in the back with sunglasses on her head, you're up.

QUESTIONER: Hi. I see the median household income, but it doesn't tell me --

MS. SCHWEITZER: Could you speak up a little bit?

QUESTIONER: Yes. It doesn't tell me how many incomes are in the household from the single family in Loudoun County, even towards the Metro. Do we have
any percentages for that type of transition and what -- how many incomes are in the households?

MS. SCHWEITZER: So, AMI is generally calculated on an individual basis, a two-person household, three-person household, and a four-person household, but does anybody want to talk about the way that that AMI is calculated and how it's different depending on individuals or households?

MS. COYLE ETRO: The only thing I would say, it's usually when you use it as a standard you're talking about a four-person household, but you're -- but you're not identifying how many incomes are coming into the household.

MS. SCHWEITZER: There you go. Yes, the microphone, please. Thank you.

QUESTIONER: Hi. I'm wondering if there were a more regional approach what would each of you see as the most effective role that government could play in terms of either policy, or incentives, or my sense is that inclusionary zoning hasn't worked very well in the District to really generate a lot of low-income housing, but beyond that, think creatively.

MS. SCHWEITZER: Creative solutions, AJ?

MR. JACKSON: Well I think it goes back to this, understanding the need from a housing production standpoint, right. The Council of Governments has written about this but, you know, how many units do we really think we need to produce just to even maintain the level of affordability we have, let alone to sort of, you know, reverse the trend?

And then again specific targets by jurisdiction for housing -- for housing production that there's accountability towards it, I think that's probably the greatest, you know, thing that I see coming out of this, because you don't. That way you don't have the watering down of the plans because there's this -- there's accountability.

MS. SCHWEITZER: Who do we have? Yes, up front here.

QUESTIONER: Thank you very much. As I understand it, at least in Arlington, if you build a new apartment building and 40 percent of the units are vacant the
land -- the owner essentially can leave those units vacant and keep their real estate property taxes down and don't have to rent -- drop the rent in order to fill it up.

So, I can't speak to D.C., but I'm pretty sure that's how it works in Arlington. So if you have a new luxury building, you don't have to drop the rent in order to fill it, you can just keep your taxes down by keeping it partially empty. So, what about changing the property tax structure so that big developers like, say, Monday Properties, God forbid, JBG, would have no incentive to keep places empty, rather than full?

MS. SCHWEITZER: Anybody wants to take that?

MR. JACKSON: Sure. You can't operate a building at 40 percent vacancy and not lose a lot of money. So, I don't know -- you know, I don't know if that's happening, or if someone would do that, but it doesn't -- I mean the real estate taxes relative to the lost revenue, seems like a very bad business decision.

MS. SCHWEITZER: Who is next? We have this gentleman right here in the tie with glasses on, that doesn't really narrow it down, but.

QUESTIONER: How do you see minimum parking requirements affecting the cost of construction, a lot of work, especially from Donald Shoup saying that the minimum parking for most jurisdictions, especially in urban and inner-ring suburbs, is too high and it's increasing costs quite substantially, and then part of the supply costs?

MR. JACKSON: Yes. (Laughter) I mean it's -- I mean it's very expensive, you know, it could be 50,000, $60,000 of space to build, and so it's a significant issue if you're over-parked just by code, you know, above demand.

MS. COYLE ETRO: I would just say from a policy standpoint we're looking at that relationship and also a way to reduce parking in areas where we want higher densities to try to reduce the costs. We have planned an overhaul of our zoning ordinance to look at barriers to affordability, and I think the parking standards will be one of those that we'll look at very closely.

MR. JACKSON: I will say on the radical idea side, the district, in some
instances, has gone to parking maximums, away from parking minimums, as a way to not try
to chase the tail of the car constantly, but just say we’re going to force people and other
means of transportation.

MS. SCHWEITZER: All right. I see; a gentlemen here in a pink tie with
headphones.

QUESTIONER: Thank you. The pink tie does -- it pays off. One question:
what opportunities do you see from the recently enacted Opportunity Zone Law?

MS. SCHWEITZER: I'm glad you brought up. Thank you for mentioning
OZs. Who wants talk about OZs.

MR. JAKABOVICS: Sure. So, opportunity zones are -- does everybody
know what and what the opportunity zones are?

MS. SCHWEITZER: And I want to break it down, briefly.

MR. JAKABOVICS: Briefly, okay. So, basically in the -- whatever they
called it -- the 2017 tax code overhaul -- I forget what the actual name is -- sorry.

MS. SCHWEITZER: Tax Cuts and Jobs Act.

MR. JAKABOVICS: Jobs Act, yes, they're all called Tax Cuts and Jobs Act
-- (laughter) -- so I wasn’t sure if that was right one. So, basically a certain number of
census tracts in each state, or D.C. being the district, were able to be allocated an
opportunity zone designation which would entitle new investment in those census tracts that
capital gains that are flowed into that development could be deferred, and if you hold for a
significantly long period of time could be eliminated entirely.

And so a minimum of five- to seven-year hold really before it starts paying
off, and then after ten years is when it would fully forgive any tax liabilities, on the capital
gains from the new investment. They're sort of controversial because the rules aren't really
well written at this point, there's actually no obligation within the legislation, or the regs to
actually require any benefit to the existing residents of the community, which is a non-trivial
sticking point for a lot of us.
And so the issue is that not only were census tracts that were already designated as low income based on sort of some lag data, so there may have been gentrification, and neighborhood change, and upscaling, and things like that, already in place in formerly low-income neighborhoods, but you could also designate a certain percentage of your opportunity zones as census tracts that were adjacent to these types of neighborhoods.

And so in some places, including in D.C., there a number of neighborhoods that have been selected for the opportunity zone designation that are already would be considered by most accounts to already be doing just fine, or better than just fine.

And so there is, I think, a concern that while there is an opportunity to potentially have socially-minded investors coming in and doing good in places that otherwise would not see investment, there's also a lot of other opportunity including -- more opportunity, there's nothing to stop you from building a parking lot, pursuant to the previous set of comments, for a stadium, for example, and reaping opportunity zone tax benefits. Or jobs that are going to sort of flow out of the community rather than flow into the community.

So, while there is some potential for social-minded investors to come in and do good in places, and potentially shift the economics of a development deal, to make it feasible, there's also far more opportunity, just to see the money flow into deals that were likely going to happen anyway, which is not a particularly good use of taxpayer funds, in my own personal opinion.

MS. SCHWEITZER: Right. I recall being on -- or I was in the audience at a panel that AJ was on, and a Prince George's County official was sitting next to me, and when the subject of Opportunity Zones came up, she said, you know, we can't talk about OZs like it's a housing program, it's a tax shelter for Trump's friends. (Laughter) So I think that is -- that is the way that I think OZs are viewed by some affordable housing advocates, is my point.

Let's see. Bob McCartney from The Washington Post?
MR. McCARTNEY: Hi. A very interesting discussion. Could you talk a little bit about why -- what's holding down production of housing in Prince George's County? Because there's a lot of metro stations out there that are underused, and land close to those metro stations that are -- that's underused. And frankly, it looks like the county is basically being redlined.

MS. SCHWEITZER: Who wants talk about Prince George's?

MR. JAKABOVICS: I don't know Prince George's well enough to know exactly what's going -- what's going on there.

MS. SCHWEITZER: I will say, Leah, actually when you -- one of the events that you recently hosted there was a Maryland State official there who talked about this very issue, who said that the -- you know, there's all this potential around the metro station as Prince George's.

And it's just not the -- you know, the capacity is just not being met. There's not interest among developers to build around these metro stations at Prince George's. I have no idea if this is something you've researched, but maybe you have something to say on that?

MS. BROOKS: I mean, I do want to second this point. There's both a supply problem but there's also on the demand side there are places where we could build, we could build near Western -- no, Eastern Montgomery County, we could build more in Prince George's, there might be less political opposition, but at least according to developers, the demand isn't there. When I've talked to municipal officials they say we have rezoned but the demand isn't there.

MS. SCHWEITZER: Interesting. This is going to be our last question in the last minute that we have left. So I'm going to choose as wisely as I possibly can. Let's see here, we have a lady in the back standing, a gray dress. We have one more? Okay. We'll have one more after this.

QUESTIONER: My question is about technology. So we heard about old
impediments in the industry for building, but it seems to me that we are putting -- building space stations at the moment, technology is lowering the cost in almost every part of -- at least consumer business. On the mortgage side we have Quicken Loans doing Rocket Mortgage just almost entirely online. What are your thoughts about the role of technology in the building process?

The first question someone from the first row asked about building offsite. Do you have any other technologies that you are thinking about? Whether it is analytics, robotics, or anything; what is the -- what is the developer industry thinking about the use of technology in, especially lowering the cost of building and providing affordable housing?

Thank you.

MR. JACKSON: I think on the building side it's challenging for the reasons that were discussed in terms of just variation in code, transportation issues, it's an atypical way to finance, but it does make all the sense in the world. I mean you don't get a bunch of metal shipped to your driveway and people come and try to assemble a car, you get a pretty crappy car that will be pretty expensive.

So it will get there. But on the operating side I think that's where we think about technology a lot, in the operation of buildings and ways to drive cost out of operations of buildings, while also increasing service for residents and buildings.

I think that's where you'll see more technologies faster and sooner. I mean you already see that with some of the package delivery, and valet, and robotic cleaning in the hotel. So you already see it there on the operating side. I think that's where it'll be first, and then I'm not sure when, you know, sort of when the switch will flip on the building site side, or the modular construction side.

MR. JAKABOVICS: Yeah. I mean I think, you know, the thing that people typically point to is sort of the next, you know, sort of big transformation in building tech is sort of 3D printing. It's not really there yet. I mean there are some great mock-ups of these sort of -- you know, sort of fire hoses spraying concrete, and like 24 hours later you have like
this one room, a sort of Adobe-type hut kind of thing that --

You know, again, like it's -- you got to start someplace, but I think that it'll be some time before you would get to really kind of -- it's going to look radically different, than what we've been doing -- I think there's -- I think the question of technology, the role of technology, I think AJ is right, you're going to see it sort of behind the scenes before you see it in front of the curtain.

But I think one of the interesting things is that there's a -- I think a robust debate in a very small number of sort of very wonky folks as to whether there's been an increase in productivity among construction labor.

McKenzie came out with a survey two years ago, I would say, that indicated that, you know, there's been no growth in productivity in the construction sector since the 1950s. And so when you see these sort of, you know, these spikes, and all these other sectors, and constructions kind of like that.

There is a separate analysis by the BLS that seems to indicate that in fact in residential construction, there's been tremendous productivity gains so -- and I think technology is clearly a part of that, right, the ability -- I mean just thinking about like the role of GPS and the ability to do survey marketing -- marking and things like that.

You know, just-in-time delivery of materials, right. So things that sort of exist in other parts of the production sphere, do I think manifest on some level even within construction. But again because of the layers of regulation and rules, and existing processes, and the risk of making bad bets, you know, sort of I think the path dependency by and large is to see incremental change before we see kind of wholesale all of a sudden, right.

Like, you know, you order something from Amazon, you add some -- pour water on it, right, the Jetsons type thing, and, oh, a new house. You know, I don't think we're quite going to see that anytime soon but, you know, who knows; right.

It wouldn't surprise me if Amazon, or Google, or one of these guys has got
like, you know, the next house, that the entire thing is in Echo, or something like that --
(laughter) -- that's just entirely designed to sell you something, and so they'll take the loss on
the house for the opportunity to sell you something. Who knows, right? Like, they'll make
the housing affordable. I don't know. There's your radical policy idea.

MS. SCHWEITZER: We have one more, time for one more, all right, last
question I see your hand shot up right here in the back here, there's gentleman, you, yes, yes?

MR. CRAIG: I'm John Craig. I was involved in opposing Amazon's coming
to Arlington right across the river here. And I wanted to first point out that Brookings
Scholar, Amy Liu, wrote an article published in the Harvard Business Review that said that
kind of HQ2 coming to an area doesn't, in fact, increase jobs. And what does is to support
small startups, and that's where that money should go. That's the backdrop.

But what my question is, why is it -- maybe in two quick answers from you --
that Arlington welcomed Amazon with open arms whereas New York, said basically, go to
dell.

SPEAKER: New York didn't say that. I'm from New York.

MR. CRAIG: Okay, but they sent them out.

MS. SCHWEITZER: Oh. We have argument taking place.

MR. CRAIG: And they didn't come in.

SPEAKER: We'll talk later on.

MS. SCHWEITZER: Well I think that -- I actually wrote a story on this,
maybe I can just refer you to that story, basically why, and Bob McCartney has done this
too, The Post. That essentially, what was at stake, what was different about the political
climate in New York versus Arlington, and you're dealing with very different, very different
responses from elected officials in both of those jurisdictions.

So, I'm not going to get into it now because we don't have any time left. But
essentially it's kind of boiled down to politics.
QUESTIONER: But a big part of that was that --

MS. SCHWEITZER: Can we hand Bob the mic, here?

MR. McCARTNEY: A big part of that was that New York was offering much, much larger incentives to Amazon than Virginia was. Like four times as much, and the size of the incentives package that was being offered became the sticking point. That really annoyed a lot of people, and that’s where -- and so some of the politicians switched their views because of that.

QUESTIONER: And Arlington had JBG, and this is if we can -- the property owner were a huge trap, so Amazon already knew who they were dealing with --

MS. SCHWEITZER: I'm sorry. For anybody who can't hear we are -- we do need to cut this off, but your point is well taken. Yes. JBG owned a lot of buildings in one place and it just made it a lot easier for them to deal with one landlord. I mean it makes sense.

So that's all we have. That's all the time we have. Thank you so much. We are going to -- (Applause)

I want to bring up Jaclene Begley from Fannie Mae to give closing remarks.

Before we leave we just have a few closing remarks.

MS. BEGLEY: Okay. I'll be very quick. So, I just wanted to sort of bring everything together and say that we started this report as an effort to lay out the facts about what's going on in the D.C. Region.

And I thought the panel today did a wonderful job of shedding light on the data that we had. Thank you so much for coming and sharing your insights on what's -- on development in the region with us. And thank you to our Moderator too for guiding the conversation. And also I wanted to thank Brookings for hosting us, and especially the team today that really, like, set the plan out for us. This was wonderful. And thank you guys for coming. Thanks. (Applause)
CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Carleton J. Anderson, III

(Signature and Seal on File)

Notary Public in and for the Commonwealth of Virginia
Commission No. 351998
Expires: November 30, 2020