

12/2/2022

COUNCIL OF THE CITY OF PHILADELPHIA
JOINT COMMITTEES ON STREETS AND SERVICES AND
GLOBAL OPPORTUNITIES AND THE CREATIVE/INNOVATIVE ECONOMY

Remote location using Microsoft® Teams
Friday, December 2, 2022
10:00 a.m.

PRESENT:

COUNCILMAN ISAIAH THOMAS, CHAIR
COUNCILMAN DAVID OH, CHAIR
COUNCILWOMAN CINDY BASS
COUNCILWOMAN KENDRA BROOKS
COUNCILMAN KENYATTA JOHNSON
COUNCILMAN MARK SQUILLA

RESOLUTION: 220208

12/2/2022

1 - - -

2 COUNCILMAN THOMAS: Good
3 morning, everybody. Thank you for
4 joining today's Committee hearing for
5 the Streets and Services Committee as
6 well as Global Opportunities and
7 Creative/Innovative Economy. This is
8 a joint public hearing of the
9 Committee on Streets and Services and
10 the Committee of Global Opportunities
11 and Creative and Innovative Economy
12 regarding Resolution No. 220208.

13 Before we begin, I'd like to
14 recognize Liz Sweeney who would like
15 to read the required announcement for
16 today's hearing.

17 THE CLERK: Thank you,
18 Chairman.

19 I understand that state law
20 currently requires that the following
21 announcement be made at the beginning
22 of every remote public hearing as
23 follows: Due to the current public
24 health emergency, City Council
25 Committees are currently meeting

12/2/2022

1 remotely. We are using Microsoft
2 Teams to make these remote hearings
3 possible.

4 Instructions for how the
5 public may view and offer public
6 testimony at public hearings of
7 Council Committees are included in the
8 public hearing notices that are
9 published in the Daily News, Inquirer
10 and Legal Intelligencer prior to the
11 hearings and can also be found on
12 PHLCouncil.com.

13 Everyone who has been invited
14 to the meeting to testify should be
15 made aware that this public hearing is
16 being recorded. Because the hearing
17 is public, participants and viewers
18 have no reasonable expectation of
19 privacy. By continuing to be in the
20 meeting, you are consenting to being
21 recorded.

22 Additionally, prior to
23 Councilman Thomas recognizing Members
24 for the questions or comments they
25 have for witnesses, I will note for

12/2/2022

1 the record at this time that we will
2 use the chat feature available in
3 Microsoft Teams to allow Members to
4 signify that they wish to be
5 recognized. In order to comply with
6 the Sunshine Act, the chat feature
7 must only be used for this purpose.
8 Thank you.

9 COUNCILMAN THOMAS: Thank you
10 for that. Ms. Sweeney, will you
11 please call the roll to take
12 attendance. Members that are in
13 attendance, please take a couple of
14 minutes to say a few remarks so that
15 your image can appear on the screen.

16 THE CLERK: Committee on
17 Streets and Services, Vice-Chairperson
18 Squilla.

19 COUNCILMAN SQUILLA: Good
20 morning, Mr. Chairs. I am present.

21 THE CLERK: Councilmember
22 Bass.

23 (No response.)

24 THE CLERK: Councilmember Oh.

25 COUNCILMAN OH: Present.

12/2/2022

1 Thank you very much for holding this
2 hearing.

3 THE CLERK: Councilmember
4 Brooks.

5 COUNCILWOMAN BROOKS: Good
6 morning. I'm present.

7 THE CLERK: Councilmember
8 Johnson.

9 (No response.)

10 THE CLERK: Councilmember
11 Gilmore Richardson.

12 (No response.)

13 THE CLERK: Chairperson
14 Thomas.

15 COUNCILMAN THOMAS: Good
16 morning. I'm present.

17 THE CLERK: And the Committee
18 on Global Opportunities and the
19 Creative/Innovative Economy,
20 Chairperson Oh is present.

21 COUNCILMAN OH: I am present.

22 THE CLERK: Councilmember
23 Gilmore Richardson.

24 (No response.)

25 THE CLERK: And,

12/2/2022

1 Councilmember Isaiah Thomas.

2 COUNCILMAN THOMAS: I'm
3 present. Thank you. Before we --

4 THE CLERK: And --

5 COUNCILMAN THOMAS: Go ahead.

6 I'm sorry.

7 THE CLERK: Last member,
8 Councilmember Squilla.

9 COUNCILMAN SQUILLA: Good
10 morning. Present.

11 COUNCILMAN THOMAS: Sorry
12 about that, Councilmember. And thank
13 you, Elizabeth.

14 A quorum of the Committee is
15 present and this hearing is now called
16 to order. Before we begin to read the
17 resolution, I would like to pass it to
18 the Co-Chair of this Committee,
19 Councilmember Oh, to lead us as it
20 relates to this Committee. And I
21 would also like to note for the record
22 that Councilmember Bass is present as
23 well too.

24 Councilmember Oh.

25 COUNCILMAN OH: Thank you

12/2/2022

1 very much, Chairman Thomas and all the
2 members of the Committees and all our
3 witnesses and the viewing public.

4 We have been interrupted by
5 the pandemic and a lot of things were
6 shut down and a lot of patterns have
7 changed. But as we're coming out of
8 the pandemic, we are dealing with
9 changes in the economy. Every day
10 people read about, for example, the
11 electric vehicle or EV cars that are
12 being manufactured.

13 And by 2030, it's anticipated
14 that 1 out of 4 vehicles will be EV.
15 And by 2050, 80 percent of the
16 vehicles in United States will be
17 electric vehicles. We began a process
18 here in the City of Philadelphia when
19 it was determined that the previous EV
20 program, which was innovative at its
21 time, was not sustainable as more EVs
22 were coming online and we needed a
23 public charging infrastructure.

24 And with the help of many
25 organizations and our Office of

12/2/2022

1 Transportation, Infrastructure and
2 Sustainability leading the way, we had
3 town hall meetings and stakeholder
4 meetings and hearings with experts,
5 all of which culminated in a report of
6 how we were going to implement EV
7 charging throughout the City of
8 Philadelphia.

9 Since then, I think things
10 have been very disrupted,
11 understandably by COVID. However, at
12 this point in time, we would like the
13 public to know and we would like to
14 know exactly what we are doing as a
15 City to meet this change and demand
16 that is both, one, in response to the
17 environment but also to the practical
18 nature of charging vehicles. Thank
19 you very much.

20 With that, I'll ask the Clerk
21 to call the first panel.

22 THE CLERK: The first panel
23 is Chris Puchalsky.

24 MR. PUCHALSKY: Hi. Good
25 morning. Thank you, Chairman Thomas

12/2/2022

1 and Chairman Oh and members of the
2 Committee, for inviting me to testify
3 today on Resolution 220208. My name
4 is Christopher Puchalsky. I'm the
5 Director of Policy and Strategic
6 Initiatives in the Managing Director's
7 Office of Transportation,
8 Infrastructure and Sustainability also
9 known as oTIS.

10 oTIS coordinates planning and
11 decision-making among the entities
12 that manage local transportation and
13 utilities, infrastructure and directly
14 oversees Department of Streets, Water
15 and Office of Sustainability. In
16 2017, the City formed the Electric
17 Vehicle or EV Policy Task Force to
18 encourage the use of EVs within the
19 City's wider multi-modal
20 transportation network.

21 In 2018, the EV Policy Task
22 Force released a final report which
23 issued recommendations to promote EV
24 use in Philadelphia. And I do as an
25 aside thank Councilmember Oh and

12/2/2022

1 Councilmember Squilla. They
2 participated heavily in that task
3 force. They were on the task force
4 and they helped to formulate the
5 ultimate recommendations in that
6 report.

7 EV technology is rapidly
8 evolving, and the ongoing shift from
9 petroleum to electricity is expected
10 to accelerate. Thus, the task force
11 focused on addressing the challenges
12 of meeting the growing demand for
13 charging while distinguishing it
14 separate from parking challenges,
15 which impact drivers of all vehicle
16 types, particularly in dense
17 neighborhoods in the City.

18 With this point in mind, the
19 task force advocated for pursuing a
20 multi-faceted approach to EV charging
21 that addresses the most common
22 barriers to EV use, which can include
23 cost, convenience and awareness.
24 Among other recommendations, the final
25 report recommending transitioning from

12/2/2022

1 the electric vehicle parking space
2 programming and grandfathering all the
3 current participants and establishing
4 alternative charging opportunities
5 that offer greater public
6 accessibility.

7 A successful approach to
8 long-term sustainable transportation
9 should seek to expand all
10 Philadelphians access to safe,
11 affordable and low carbon
12 transportation. EVs are the key
13 component of achieving that goal. The
14 work of the EV Policy Task Force
15 demonstrated that there is a broad
16 spectrum of potential partners who've
17 embraced this vision in already
18 planning leadership roles in reducing
19 carbon emissions.

20 A few highlights: 180 new
21 EV-ready spaces in parking garages
22 have gone through the zoning process
23 since 2018. In addition to that, 250
24 new EV chargers, including 80 fast
25 chargers have been installed in the

12/2/2022

1 City since 2018 and those are publicly
2 accessible charging points, so 250 new
3 EV chargers.

4 A big highlight was that on
5 November 15, 2021 the Bipartisan
6 Infrastructure Law was enacted to
7 provide funding for federal aid
8 highways, safety transit and other
9 purposes. Included in the bill is a
10 new National Electric Vehicle
11 Infrastructure, NEVI, Formula Program
12 that provides Pennsylvania more than
13 170 million over the next five years
14 to support EV infrastructure. The
15 program will be administered by
16 PennDOT and we expect the first round
17 of funding to open this month.

18 The bill also set aside an
19 additional 2.5 million to ensure EV
20 charger deployment meets the
21 Biden-Harris Administration
22 priorities, including equity
23 commitments for increased EV charging
24 access in rural, underserved and
25 overburdened communities. USDOT will

12/2/2022

1 award funding through its
2 Discretionary Grant Program. The
3 timeline for that is not yet known,
4 but it will just explore this
5 opportunity with a NOFO or a Notice of
6 Funding Opportunity is released.

7 In 2021, the Office of
8 Sustainability worked with the
9 Department of Fleet Services to
10 develop the Municipal Clean Fleet
11 Plan, which provides guidance and
12 recommendations on how the City can
13 transition its fleet to electric and
14 alternative fuel options. The plan
15 outlined goals for vehicle procurement
16 targets in 2025 and 2030.

17 As a follow-up, the
18 Department of Fleet Services has over
19 two dozen Level 2 EV chargers, so
20 those are chargers averaging eight
21 hours for a full charge at various
22 municipal sites to support the
23 electrification of the municipal
24 fleet.

25 Currently, the Department of

12/2/2022

1 Fleet Services is working with Office
2 of Sustainability and OIT to pilot a
3 DC Level 3 fast charger, so an average
4 15 minutes for a full charge at a
5 fleet shop site. If this pilot is
6 successful, the Department of Fleet
7 Services will install these Level 3
8 fast chargers at various fueling
9 stations.

10 Lastly, the City will hire
11 dedicated staff this Fiscal Year 2023
12 to oversee the public EV strategy. We
13 look forward to continuing this
14 engagement in the long-term with local
15 organizations, private sectors, public
16 utilities and City Council and
17 Philadelphians at large on how to make
18 EVs work in the City. This concludes
19 my testimony. Thank you for the
20 opportunity to testify and your
21 interest in this topic. And I will be
22 happy to answer any questions that you
23 have at this time.

24 COUNCILMAN OH: Thank you
25 very much for your testimony.

12/2/2022

1 At this time, I'll ask if any
2 of the Committee members have any
3 questions for this witness?

4 COUNCILMAN SQUILLA: Thank
5 you, Mr. Chair.

6 Chris, real quick, and it
7 seems like there's going to be some
8 resources there. But is there a I
9 guess citywide plan that is being
10 worked on where we could make sure
11 that there will be electric charging
12 accessibility in all areas of the City
13 that we are putting together now? I
14 know you mentioned there being in some
15 of the charge fueling stations if this
16 pilot is successful, but what is the
17 overall global plan for the City?

18 MR. PUCHALSKY: Yeah. We
19 started to look at this question. I
20 think there are probably two aspects
21 here. I think this is really driven
22 by the funding sources, the PennDOT
23 NEVI Plan. The first part of
24 PennDOT's NEVI Plan, so the way it
25 worked, in order to access this bill

12/2/2022

1 money, each state needed to submit a
2 plan to DOT in order to access these
3 NEVI funds. So PennDOT submitted its
4 NEVI Plan over the summer and it was
5 approved by the feds.

6 The first part is filling out
7 what they're calling alternative fuel
8 corridors, so they designated a number
9 of corridors, including facilities in
10 the City. And what they want to do is
11 they want to have chargers along these
12 facilities, mostly the interstates in
13 the City of Philadelphia. So that
14 will be the focus of the first two
15 rounds of PennDOT funding.

16 Next we move to what I think
17 is more the community-based charging,
18 so not necessarily near an interstate
19 exchange but a little bit more in the
20 community themselves. And I mean,
21 there is overlap between these two.
22 That will be the focus of the next
23 three rounds. To get specifically to
24 your question, there's not yet a
25 formal plan.

12/2/2022

1 And I think what we need to
2 do, Councilmember, is update the 2018
3 strategy that the task force came out
4 with. To put it in black and white,
5 there have been some internal
6 technical exercises, mapping
7 exercises, seeing what possibilities
8 are for charging at community sites.

9 And I think we've been having some
10 good brainstorming about what makes a
11 good site. You know, some of it's on
12 City-owned property like rec centers,
13 so those would be projects that the
14 City might either do or look for a
15 concession to do.

16 Other opportunities are
17 really trying to enable the private
18 sector or other public sector actors
19 who have parking lots to install
20 charging on their sites and try to get
21 the money to them even if it doesn't
22 necessarily go through the funding, so
23 whether those are big box stores,
24 grocery stores and even something like
25 nail salons. So really think about

12/2/2022

1 where do Philadelphians drive and are
2 going to be leaving their car for some
3 period of time to get some charge on a
4 Level 2 or even a Level 3 charger and
5 trying to encourage that.

6 I don't think we're quite to
7 the point yet where there's really
8 what I'll call a gas station model yet
9 where the economics pencil out, Wawa,
10 some of those. I think I cited AD, DC
11 fast chargers. Some of those were
12 installed by Wawa in the Northeast.
13 That's great. They're stepping up,
14 but we probably we need some more of
15 that before there's really this gas
16 station model where people think of it
17 like just filling up your car on gas.
18 I go, I stay for a few minutes and
19 then I leave.

20 COUNCILMAN SQUILLA: Yeah.
21 And I'm seeing some additional ones
22 being done in some of these strip
23 malls and other things you're starting
24 to see them pop them. But I was just
25 wondering if they're popping up as

12/2/2022

1 part of a global plan, right, because
2 we need to have an idea of where these
3 are. And I know with gas stations
4 they're very difficult. Sometimes you
5 have gas stations in areas where
6 there's a bunch of them and then you
7 might have to drive 7 miles to get to
8 a gas station, right?

9 MR. PUCHALSKY: Yeah.

10 COUNCILMAN SQUILLA:

11 Especially if we're looking at the
12 City as a whole, and in our
13 underserved communities people who
14 have access to electrical vehicles, we
15 have to really be mindful of how we're
16 planning these out. And if we're
17 going to have the private industry
18 help us, which I think we're going to
19 have to be successful, we need to be able
20 to work with where are parking lots
21 adjacent to these neighborhoods and
22 how we are going to incentivize people
23 to help us do that. I think that has
24 to be part of the plan.

25 And do we have a timeline of

12/2/2022

1 when we see this plan being
2 implemented?

3 MR. PUCHALSKY: Yeah. We
4 hope to put a job description for a
5 policy specialist to coordinate work
6 for public EV charging and parking
7 issues within the next month or two.
8 So I'm hoping we put the job out by
9 the end of the year. I can't promise
10 that.

11 COUNCILMAN SQUILLA: So we'll
12 have a hired person hopefully in the
13 new year?

14 MR. PUCHALSKY: Yeah. I
15 think that will really help having
16 dedicated staff work on the parking
17 now. Sustainability and Fleet
18 Services and OIT, they've done a
19 tremendous job of trying to get the
20 municipal fleet plan together and
21 there's some overlap, but I think we
22 do need dedicated staff to
23 specifically be working on the public
24 side.

25 COUNCILMAN SQUILLA: I would

12/2/2022

1 agree with that and would be happy to
2 help in any way and push for that, so
3 thank you.

4 MR. PUCHALSKY: Thank you.

5 COUNCILMAN OH: All right.

6 Thank you very much, Councilmember.

7 Are there any other
8 questions? I will say because I'm
9 kind of constrained in how my screen
10 is set up, if you cannot use the chat
11 feature, just say if you have any
12 questions.

13 (No response.)

14 COUNCILMAN OH: Seeing that
15 there are none, I do have questions of
16 my own.

17 So I believe, and I can't
18 recall because it's been a couple of
19 years now, I think I did introduce a
20 bill or I drafted a bill and sent it
21 over to some of the parking folks
22 about incentivizing the installation
23 of EV charging based on a reduction of
24 the parking tax, if they would put
25 that in, we would reduce the parking

12/2/2022

1 tax. And I quite frankly have not
2 heard back on that.

3 But are there things in your
4 plan that would kind of incentivize
5 where people actually do park their
6 vehicles commercially or customers or
7 residences?

8 MR. PUCHALSKY: I think the
9 PennDOT NEVI Plan should provide
10 significant public sector support for
11 the installation of charging by
12 private entities. It's my sense
13 that -- and maybe some of the later
14 folks to testify can say more about
15 this who have got more expertise --
16 but that right now if you own a gas
17 station, you're generally not making a
18 fortune of selling the gas, but you
19 get something off of it. And then the
20 soft drinks and the donuts or whatever
21 else kind of pay the rest of the bills
22 when people go in to pay.

23 It's my sense that selling
24 kilowatt hours for EV charging is not
25 even as remunerative as the gas is

12/2/2022

1 today, so I think we have to look
2 carefully at the need for ongoing
3 public sector support to essentially
4 be helping to fund people fueling
5 their vehicle, so we should all be
6 eyes wide open about that and where
7 that is coming from. But at least on
8 the capital side, the bill funding
9 going through PennDOT through the NEVI
10 should provide significant incentives.

11 COUNCILMAN OH: As I recall,
12 we had an issue because electricity is
13 a public utility service and we or the
14 private sector cannot start charging
15 for electricity, but I was not clear
16 on the fact that they're not charging
17 for the electricity. They're charging
18 for the use of the charger. Does that
19 make sense?

20 MR. PUCHALSKY: Yes, it does.
21 And I think PECO, they know the
22 details of the rules more than I do.
23 But, yeah, that was my sense also,
24 Councilmember, that there was a way to
25 charge people some fee for hooking up

12/2/2022

1 to the charger, but the economics
2 still might not be there if people are
3 actually willing to pay the costs that
4 cover the maintenance and the
5 electrons.

6 I will say though that there
7 was a bill in Harrisburg that we were
8 generally supportive of that would
9 allow PECO to take a larger role. I
10 think there are concerns about the
11 rate base, but I think there's
12 probably some reasonable amount that
13 would allow PECO to really invest in
14 some of the infrastructure that
15 they're not legally, currently able
16 to.

17 So this is something that in
18 the right format I think we would
19 support and I would hope that Council
20 could get involved in and find a way
21 to support also.

22 COUNCILMAN OH: Is there
23 anything happening nationally or
24 statewide around a surcharge to the EV
25 manufacturers or distributors to

12/2/2022

1 somehow support the fueling stations,
2 charging stations?

3 MR. PUCHALSKY: I've not
4 heard anything. So if there is
5 movement there, I have not heard it.
6 But I will say that one of the
7 concerns is the reduction in revenue
8 from the gas tax that supports the
9 infrastructure. So if I'm charging my
10 vehicle, I have all the same impacts
11 on the roadway, on bridges, et cetera.
12 As a gas power car, I don't pay nearly
13 as much.

14 So as part of larger funding
15 conversations in Harrisburg about
16 trying to address the shortfall at
17 both PennDOT and our Commonwealth
18 transit agency, there has been the
19 talk of some reasonable surcharge on
20 registration so that EV owners will
21 pay their fair share of the
22 infrastructure costs of supporting
23 their mobility.

24 So I don't think that passed
25 this term, but I think that'll keep

12/2/2022

1 coming up. And I don't think we want
2 to penalize any EV owners certainly
3 for trying to do the right thing, you
4 know. At the same time, we all have
5 to pay our fair share. So that will
6 be an ongoing topic of discussion
7 going forward.

8 COUNCILMAN OH: Thank you. I
9 know we have the Parking Authority in
10 one of our panels, but I'd like to ask
11 you, we were talking when we were
12 having a discussion about short-term
13 parking, like places around the City
14 where you could not stay there for a
15 long time, but you could stay there
16 for a limited time and also charge
17 your electric vehicle. Is there any
18 progression in that conversation?

19 MR. PUCHALSKY: I'll be
20 honest, I think what you're talking
21 about probably works itself out in the
22 form of some type of concession where
23 a company that provides charging
24 services is able to install chargers
25 along the public right-of-way that

12/2/2022

1 residents or visitors can then access
2 through some type of program.

3 We haven't made a lot of
4 progress on that over the last few
5 years between the pandemic and the
6 rapidly changing structure. I hope
7 though that in the next years as I
8 talk to Councilmember Squilla we redo
9 our 2018 Task Force plan and as we
10 hire dedicated staff, that's something
11 we can take another look at. We just
12 will have to be eyes wide open about
13 the need for ongoing OEM support for
14 such an endeavor, though.

15 COUNCILMAN OH: Okay.
16 Finally, just a couple of points,
17 couple of questions on technology. So
18 I'm aware, and I know you are, of kind
19 of like available parking space
20 technology that identifies open spaces
21 so that people don't have to circle
22 around looking for spaces, reducing
23 kind of emissions and reducing wasted
24 time and reducing frustration, so that
25 technology is there. But there's also

12/2/2022

1 technology, you know, because when
2 people ask me about the tractor
3 trailers like legitimately if it's not
4 a residential neighborhood, where do
5 tractor trailers do, industrial,
6 commercial, things like that.

7 However, there's this
8 technology whereby -- and it's
9 currently used. It's just we don't
10 use it here in Philadelphia. I'm not
11 sure we use it in Pennsylvania. Maybe
12 we do, that a tractor trailer coming
13 from Pennsylvania, you know, they need
14 a place to park so there's an
15 industrial place where someone has
16 already paid for that tractor trailer
17 parking, but they have an app and it
18 makes the place available.

19 They pay like a rental fee to
20 park their vehicle there. And it
21 seems that technology can be used to
22 alleviate a lot of parking congestion
23 throughout the City whereby, for
24 example, a supermarket parking lot
25 from like, I don't know, 8 o'clock or

12/2/2022

1 9 o'clock at night until 6 o'clock in
2 the morning has designated spaces
3 available to alleviate putting
4 commercial vehicles in places where it
5 really shouldn't be. But everything
6 is transacted over the app. You pay
7 for it. You park there. You don't
8 stay longer than you need to or you
9 get a big fee.

10 Those parking spaces can also
11 be EV charging spaces, incentivizing
12 like the supermarket big parking lot
13 that's got to pay the water tax and
14 all that, run-off tax to do that. Is
15 that something that your office is
16 looking at? Is that working in this
17 plan somehow?

18 MR. PUCHALSKY: I think this
19 is an idea that's worth pursuing.
20 This came up a few years ago, and
21 probably like a lot of things it got
22 knocked out of the to-do list by the
23 pandemic, but it's probably worth
24 circling back to this idea. And this
25 goes to -- this is larger parking

12/2/2022

1 issues than just EV that come up.
2 When we had looked into it before the
3 pandemic, there were insurance and
4 zoning issues, liability issues with
5 having this auxiliary use for the
6 parking space overnight.

7 And as we heard it before, a
8 lot of it was about having residents
9 to be able to find a place to put
10 their vehicle overnight and it wasn't
11 so much about EVs, but I think it's
12 definitely worth pursuing. And that's
13 one of the reasons why the staff
14 member that I talked about will also
15 be looking at general parking issues
16 and we will certainly want to
17 coordinate with the Parking Authority.
18 You know, new leadership coming over
19 there we're excited about. So I think
20 we can really try to work together
21 with the Parking Authority and other
22 partners to look at this issue and
23 we'll be calling you also, Council.

24 COUNCILMAN OH: Okay.
25 Fantastic. Finally, there are issues

12/2/2022

1 about lithium and the amount of
2 lithium that may be needed to
3 basically have battery power that is
4 long-lasting. And there is technology
5 to basically create lithium-like
6 properties. And do you know where we
7 are as a nation regarding the fact
8 that we need all this basically
9 ability to have longstanding or long-
10 charging batteries?

11 MR. PUCHALSKY: Yeah, this is
12 an important issue. And I will say,
13 Councilmember, I'm not a subject
14 matter expert so I will not try to go
15 beyond my expertise in answering your
16 question. I will say a few things
17 that I do know, though. When we've
18 been looking at all the funding pods
19 in the bill, we looked at them to see
20 which ones we can apply for it among
21 the numbers that really weren't suited
22 for us but were for more industry was
23 significant funds to go for battery
24 research, so this is something where
25 the country as a whole with the

12/2/2022

1 Bipartisan Infrastructure Interest Law
2 is putting significant resources.

3 If you look at how -- there's
4 that old cartoon, you know, how a bill
5 becomes a law, there's the same kind
6 of progression how an idea becomes a
7 product in the marketplace, through
8 technology levels. And when I looked
9 at those funding pods, the federal
10 government is investing at numerous
11 points along the technology, you know,
12 research development, deployment
13 ladder to get new battery technologies
14 out.

15 I think it's a significant
16 area of concern. Mostly it's not a
17 local issue and we don't have a lot in
18 it. I think where it does become
19 relevant, there's not only the issue
20 you just mentioned, but there's
21 several other issues with EVs. EVs
22 still take up space. They generate
23 just as much congestion. And that's
24 why in our general transportation
25 strategy CONNECT we think that part of

12/2/2022

1 the solution is investing in transit,
2 walking and biking also. EVs will not
3 solve all of our problems. They are
4 an important and critical part of the
5 solution, but they're not the whole
6 solution, and we have to have a really
7 multi-modal city where people have
8 options.

9 Something like a third of
10 Philadelphia households don't have
11 residents to any -- residents don't
12 have access to any car, and something
13 like 42 percent of African American
14 households don't have access to a car,
15 so that's why making transit, walking
16 and biking safe, reliable, convenient,
17 affordable are also part of the
18 strategy.

19 COUNCILMAN OH: All right.
20 Thank you very much. Thank you for
21 answering all those questions.

22 I will ask the Committee
23 members and the Chair if anyone has
24 any questions. If not, we'll move on
25 to the second panel. But if you have

12/2/2022

1 questions, please let me know.

2 (No response.)

3 COUNCILMAN OH: All right.

4 It looks like we don't. Thank you
5 very much.

6 MR. PUCHALSKY: Thank you.

7 COUNCILMAN OH: Clerk, will
8 you please --

9 COUNCILMAN SQUILLA: One
10 second. One second, Mr. Chair.

11 COUNCILMAN OH: I'm sorry.

12 COUNCILMAN SQUILLA: I just
13 wanted to add one thing on that. We
14 also looked at the Building Code,
15 right, so that new construction
16 garages would incorporate
17 accessible -- instead of having
18 parking garages, when we build them,
19 make sure that there's EV
20 accessibility to that too.

21 Is there something else that
22 you think we could do moving forward
23 to any new development, because this
24 is going to go over time and be more
25 and more useful, right, what we can do

12/2/2022

1 in existing structure, but what can we
2 do in all new structures that will
3 help us promote this in the future?

4 MR. PUCHALSKY: Yeah. I
5 don't -- this is the purview of the
6 Planning Commission, so I don't want
7 to speak too much. But I think it's
8 at least worth taking a look at the
9 current Zoning Code. You would need
10 to involve the Planning Commission and
11 the development community for sure in
12 that discussion.

13 But when we looked at our --
14 when we looked at the percentage of
15 spaces that were -- and I think it's a
16 little bit funny, but I think it's
17 around 5 percent, is the requirement
18 of 5 percent of new spaces for
19 EV-ready, not even have EV charging,
20 just have the conduit so they're
21 EV-ready. There were other places
22 that had a lot higher percentage. So
23 without the cost to the development
24 notwithstanding, I think it's at least
25 worth having a conversation --

12/2/2022

1 COUNCILMAN SQUILLA: Also, I
2 think by incentivizing it we can have
3 access to resources for the developers
4 also to do that as we build. There's
5 probably a way we can do that, and
6 maybe we can do that with Planning.
7 And maybe if this new hire person is
8 involved in that, it could be part of
9 their agenda to discuss.

10 MR. PUCHALSKY: Yes, sir. I
11 agree with you.

12 COUNCILMAN SQUILLA: All
13 right. Thank you.

14 Sorry about that, Council --
15 Mr. Chair.

16 COUNCILMAN OH: No, thank you
17 very much. And thank you very much,
18 Chris.

19 I'll ask the Clerk to call
20 the next panel.

21 THE CLERK: The next panel is
22 Tom Bonner and Meredith Nutting.

23 COUNCILMAN OH: Do we have
24 both witnesses available?

25 MS. NUTTING: I am here.

12/2/2022

1 MR. BONNER: Yes, sir.

2 COUNCILMAN OH: Okay. So why
3 don't we start with Tom Bonner as
4 called and then Meredith Nutting. If
5 you will please state your name for
6 the record and provide us with your
7 testimony. Thank you.

8 MR. BONNER: Yes, sir. My
9 name is Tom Bonner. I'm the Senior
10 Manager of Government Affairs for
11 PECO. And I'd like to thank you and
12 Chairman Thomas and members of the
13 Committee for the opportunity to
14 testify at this important hearing
15 today.

16 As Manager of State
17 Government Affairs, I work primarily
18 on policies to support clean and
19 advanced energy technology deployment
20 in the Philadelphia region. We are of
21 course as PECO the electric
22 distribution company serving
23 Philadelphia and the surrounding
24 counties.

25 At PECO, we believe

12/2/2022

1 transportation electrification
2 represents a unique opportunity to
3 improve the environment in the
4 communities that we serve while also
5 reducing the long-term costs of
6 meeting our transportation needs. We
7 know that electric vehicles put
8 downward pressure on utility rates by
9 making more efficient use of the
10 electric distribution system,
11 benefiting all customers whether they
12 own an EV or not. And we actually
13 have an infographic that I'll be
14 pleased to share with members of the
15 Committee to explain that in layman's
16 terms.

17 PECO has established a range
18 of programs designed to support
19 customer education and EV
20 infrastructure development as part of
21 our path to a clean commitment to
22 reduce our own greenhouse gas
23 emissions by 50 percent for our
24 operations by 2030 and with the goal
25 of achieving net zero by 2050, and

12/2/2022

1 also helping our customers and
2 communities in reducing their open
3 carbon footprints as well.

4 In terms of EV programs,
5 currently we offer incentives for
6 transit systems and commercial
7 customers, including municipalities to
8 install EV charging stations for their
9 fleets and the public within
10 enhancement incentive for projects in
11 environmental justice communities. We
12 offer reduced demand chargers for
13 operators of EV fast-charging
14 equipment, incentivizing charging
15 station deployment, which has been a
16 great success story over the last
17 several years.

18 We support customers
19 exploring EV options with technical
20 assistance through subject matter
21 experts who specialize in the
22 installation of these projects, and we
23 are currently working with the Fleet
24 Department to do analysis on their
25 depots and determine where there is

12/2/2022

1 existing access capacity that would
2 allow for the most affordable
3 upgrades.

4 We sponsor public outreach
5 and education events, including
6 hosting an EV education booth at the
7 2020 and 2022 Philadelphia Auto Show
8 and participating in EV-focused STEM
9 education programs as well as hosting
10 biannual regional EV stakeholder
11 collaboratives to discuss
12 opportunities to support equitable
13 expansion of transportation
14 electrification.

15 Give me a moment to flip my
16 page. We collaborate with PennDOT,
17 the City and local municipalities, the
18 DVRPC and other regional stakeholders
19 on EV planning and implementation of
20 the NEVI program, which you heard a
21 great deal about from Chris. This is
22 not something that is going to make a
23 difference on whether someone chooses
24 an EV or not, but we offer \$50 rebates
25 to customers who register their EVs

12/2/2022

1 with us. What that enables us to do
2 is track EV penetration on our local
3 distribution grid to identify where
4 there might be potential future
5 capacity issues. The good news is we
6 have not identified any to date, and
7 we really don't participate any in the
8 foreseeable future.

9 As the number of our
10 customers choosing to drive electric
11 continue to grow dramatically, and
12 that's been growing at a rate of 30 to
13 40 percent per year, we continually
14 evaluate our options to support EV
15 adoption with a particular focus on
16 assisting underserved communities.
17 And while individuals in single
18 family-detached homes can usually meet
19 most of their charging needs at home,
20 those who live in densely populated
21 urban areas like so much of
22 Philadelphia often don't have that
23 option.

24 In 2017 and 2018, we were
25 pleased to participate in the City's

12/2/2022

1 EV Policy Task Force to explore
2 options for providing sustainable
3 charging access solutions for citizens
4 choosing EVs. These task forces'
5 discussions produced a broad range of
6 prospective of the future of EV
7 charging in the City.

8 And as Chris and others have
9 noted, unfortunately the pandemic did
10 disrupt efforts to move forward with
11 some of those potential solutions.
12 But we believe developing those
13 options also require the coordination
14 of multiple agencies, so very pleased
15 to hear that the City is bringing on a
16 coordinator for that role as well as
17 working directly with communities
18 throughout the City. We've identified
19 solutions that are seen as community
20 amenities and not special individual
21 privileges, and I think that was my
22 key takeaway for participating in
23 those sessions.

24 While the challenges of
25 providing access to EV charging in the

12/2/2022

1 City are significant, we believe they
2 can be addressed. And as you seek to
3 move forward, we are pleased to offer
4 a few solutions or suggestions.

5 Number one, we would explore
6 opportunities to take advantage of
7 that \$2.5 billion in competitive
8 federal grant funding for underserved
9 communities. This program funded
10 under the Bipartisan Infrastructure
11 Law should open for applications next
12 year and will cover 80 percent of the
13 cost of installing new public EV
14 charging infrastructure.

15 We also note that the
16 Inflation Reduction Act will provide
17 additional funding opportunities for
18 community-based clean energy
19 solutions, which can include EV
20 charging access and based on our
21 understanding while some of those
22 final rules are still being written,
23 they were clearly intended to make
24 public EV charging access part of
25 those solutions.

12/2/2022

1 Working with local
2 institutions and businesses to
3 incentivize EV fleet inversion, so
4 again pleased to agree with what you
5 heard from Chris and some of the
6 commentary from members of the
7 Committee as well as the potential to
8 host publicly-available charging
9 stations, identify neutral space
10 curbside locations such as parks,
11 schools, rec centers, municipal
12 buildings and supporting businesses
13 that are proactively seeking to
14 attract customers who own EVs. That
15 was another takeaway from the task
16 force meetings. And we've actually
17 shared that as best practice with some
18 suburban municipalities that are
19 moving forward with installing public
20 EV charging and that has seemed to
21 facilitate their efforts.

22 Engage with equipment
23 suppliers and site hosts to explore
24 range of ownership options for
25 charging stations. I know it's been a

12/2/2022

1 challenge for the City and others that
2 there are a lot of people willing to
3 sell you and excited to sell you
4 equipment, but finding people who are
5 interested in owning and operating has
6 been a tougher task.

7 Collaborate with suburban
8 municipalities who have moved forward
9 with public access charging pilot
10 programs to gain information on their
11 lessons learned and best practices.
12 And then encourage legislators to move
13 forward with legislation that would
14 authorize utilities to offer a broader
15 range of infrastructure cautionary
16 options.

17 Our Public Utility Commission
18 has been very supportive of pilot
19 programs that have allowed us to
20 really explore what is most beneficial
21 for our customers. We do have a Level
22 2 public charging incentive -- or I'm
23 sorry, commercial customer charging
24 incentive. We got approved half a
25 million dollars for those incentives

12/2/2022

1 in our most recent rate case. That
2 was the good news. The bad news is
3 that program opened on April 1st and
4 by mid-September we were fully
5 subscribed with applications, so we
6 are already looking at what do we do
7 next and how we can we meet the
8 community need in this area while also
9 keeping affordability and overall cost
10 in mind.

11 Finally, we're still in the
12 early stages of this. A historic
13 transition will electrify our
14 transportation system. Incentives
15 providing through the Bipartisan
16 Infrastructure Law on the IRA we
17 anticipate will substantially
18 accelerate this transformation and we
19 are gearing up our internal operations
20 to be able to increase our customer
21 assistance and the tools we offer to
22 customers who are interested in moving
23 forward in this area.

24 Providing the benefits of
25 EVs, all communities in the City will

12/2/2022

1 require proactive planning and
2 community engagement. This is not
3 going to be an area where the market
4 simply sells all of our issues by
5 itself. We need to all be working
6 together. And at PECO, we're pleased
7 to support your efforts and serve as a
8 resource for the City and all the
9 communities we serve.

10 And I would just add, there
11 were a couple of questions that came
12 in Chris's discussion, hopefully I can
13 provide a little bit more information
14 on, so I'm going to go off-script
15 here. In terms of the status of
16 legislation at the state level, three
17 years ago that legislation authorized
18 utilities to develop EV charging
19 programs filed with the Public Utility
20 Commission and recover those costs for
21 infrastructure cost-sharing and
22 incentives.

23 It passed the Pennsylvania
24 Senate overwhelmingly, 42 to 6. We
25 ran into some roadblocks in the

12/2/2022

1 Pennsylvania House, and then the
2 pandemic came along and it kind of
3 wiped the slate clean. Efforts to
4 consider that legislation again
5 stalled out in its most recent
6 legislative session, but we are
7 hearing increasing interest and
8 understanding that something really
9 needs to be done, particularly to work
10 hand and glove with the NEVI program
11 and the Competitive Community Grant,
12 so we expect the coalition to be
13 continuing to work on that legislation
14 this year.

15 The second thing: On the
16 issue of batteries, everyone I know in
17 the auto industry emphasizes that the
18 precious metals that are in EV
19 batteries are far too valuable to ever
20 take and throw in a landfill. What is
21 needed are interim uses where there is
22 still about 75 percent of the energy
23 storage capability in an EV battery
24 once it is probably no longer suitable
25 for driving a vehicle, but it can

12/2/2022

1 serve as backup storage for any number
2 of applications.

3 And then in the long run,
4 once you reach economies of scale,
5 there will be a recycling market to
6 start up and will ultimately become a
7 very important and lucrative market,
8 but those are large high capital
9 facilities and you need to get to
10 economies of scale before they really
11 make sense to operate.

12 Last thing, I know there's a
13 perception that EVs are really a
14 luxury good, something that can't
15 serve the low- and middle-income
16 market. We believe in terms of fuel
17 savings and maintenance savings as
18 well as reliability, they can be great
19 vehicles for the low- and middle-
20 income market.

21 The industry has been
22 somewhat of a victim of its own
23 success, in that those first
24 generation cars, the Chevy Volts, the
25 Nissan Leafs have long outlived their

12/2/2022

1 expected lifespan and batteries are
2 exceeding anyone's expectations. We
3 do expect that secondary market to
4 start soon, especially with the \$4500
5 federal tax credit as part of the IRA
6 and we think there's great benefits
7 for not only individuals, but
8 businesses that rely on customers
9 having -- or their employees having
10 reliable transportation to getting EV
11 charging access solutions out to all
12 communities so that lower-income
13 families can start to enjoy some of
14 the benefits of EVs as well. So thank
15 you very much for the opportunity to
16 testify, and I'm happy to answer any
17 questions.

18 COUNCILMAN OH: Thank you
19 very much.

20 I'll first ask the Chairman
21 and Committee members if they have any
22 questions?

23 (No response.)

24 COUNCILMAN OH: I don't think
25 that they do. I know we have a second

12/2/2022

1 witness on this panel, but I'm going
2 to ask you some questions. And the
3 reason I'm doing that is because
4 you're providing information from a
5 legislative perspective and some
6 things that have to do with
7 technology.

8 Let me ask you: In terms of
9 the technicians and I'm actually
10 thinking about the schools, high
11 schools, career technical schools,
12 community colleges, things like that,
13 is PECO or anyone that you know of
14 kind of involved in the process of
15 preparing the workforce that is
16 necessary to maintain and provide the
17 care that these vehicles and related
18 items, you know, the charging stations
19 and all that, is that being adequately
20 done in your opinion?

21 MR. BONNER: We have about
22 three separate programs where we're
23 partnering with the Philadelphia
24 Energy Authority, with the
25 Philadelphia OIC and other

12/2/2022

1 organizations for doing that type of
2 workforce training and education.

3 I've done numerous events
4 with schools with STEM programs. And
5 one thing I tell them, you don't have
6 to be an auto mechanic to have a
7 future role in EVs. As we heard from
8 Christopher in the earlier discussion,
9 I think there is probably lifetime
10 employment in people working in the
11 planning sector as we plan and prepare
12 for this transition. Areas looking at
13 as we move toward things like battery
14 storage alternative applications, if
15 you were interested in studying
16 chemistry, you have probably a bigger
17 role in the future as somebody who is
18 interested in studying the electrical
19 side.

20 We're also working with the
21 Electrical Association of
22 Philadelphia. They are developing and
23 have developed a certification program
24 for small electricians to learn what
25 it takes to install and service

12/2/2022

1 electric vehicle charging equipment.

2 This is something we anticipate an
3 increase in the future.

4 We have some ideas that we'll
5 be revealing in the very near future
6 that I can't really talk about now.

7 But, yes, this is very much in our
8 thinking. And as I'm sure you know
9 from our CEO Michael Innocenzo, you
10 know, Mike will speak very eloquently
11 about we need to bring these
12 opportunities of the clean energy
13 economy down to our most local level
14 and make sure all communities can
15 benefit from them.

16 COUNCILMAN OH: Thank you.
17 Just as an aside, I went to Korea to
18 meet with the Vice-chairman at Hyundai
19 Motor Corporation. And the Vice-
20 chairman who was in charge of Hyundai
21 Rotem, our trade manufacturer here in
22 Philadelphia when we had them, we
23 don't have them anymore, but part of
24 that was a level of cooperation with
25 other companies, including LG Battery.

12/2/2022

1 And just recently, I met with
2 the person I met with from LG Battery.
3 And he was telling me that he has a
4 technology that's able to produce the
5 lithium-like properties, which I
6 thought would be humongous. And so, I
7 don't know if that's true or not, but
8 it certainly sounds like we're close
9 to being able to have long-term
10 battery storage without lithium. Does
11 that seem like something that you're
12 aware of?

13 MR. BONNER: Like Chris, I
14 can't speak with expertise on that
15 issue. What I know is there are
16 global efforts to both source more
17 lithium, especially outside of the
18 People's Republic of China dominating
19 supply chains as well as identify
20 alternative battery chemistries that
21 can either reduce or eliminate through
22 substitutions other type of lithium-
23 like products.

24 Again, that's why I was
25 saying that if you are interested in

12/2/2022

1 chemistry, there is a lifetime of
2 employment ahead of you looking at the
3 chemistry battery technologies. As an
4 aside, before working for PECO where
5 I've been for 15 years, I've worked
6 for another energy company. At the
7 time, they were looking at geothermal
8 power plants that have what's called
9 liquid brine, which is what comes up
10 out of the earth to power the power
11 plant and taking precious metals that
12 come up with that brine and separating
13 it out and recovering it. At the
14 time, silica was the primary thing
15 that we're looking for cell phone
16 batteries, but there are DOE-funded
17 programs right now looking at pulling
18 lithium and other precious metals for
19 batteries out of geothermal brine,
20 where you can produce electricity from
21 geothermal on one hand and capture
22 precious metals for batteries on the
23 other, which I think is a really
24 fascinating opportunity.

25 COUNCILMAN OH: Thank you.

12/2/2022

1 I'll just note my interest was they
2 were talking about headquartering
3 their company in Philadelphia or
4 around Philadelphia, so that's
5 where --

6 MR. BONNER: We'll be very
7 excited with that as well.

8 COUNCILMAN OH: -- we were
9 talking. I love the technology. If
10 you put your company in Philadelphia,
11 all the better. All right --

12 MR. BONNER: I'll share that
13 information with our Director of
14 Economic Development and please
15 forward along anything that you have.

16 COUNCILMAN OH: Thank you so
17 much.

18 We'll ask Meredith Nutting to
19 please state your name and provide us
20 with your testimony.

21 MS. NUTTING: Hi. My name is
22 Meredith Nutting. I was invited to
23 speak today after participating in the
24 Grid Magazine September 2022 article
25 about electric vehicle ownership in

12/2/2022

1 Philadelphia. So I'm here today just
2 to speak on my own personal experience
3 of owning an electric vehicle in the
4 City. I also walk, bike and use
5 public transit, so I really appreciate
6 Mr. Puchalsky's appeal to really
7 increase transit infrastructure
8 outside of personal vehicles.

9 In 2020, I bought a Subaru
10 Crosstrek Hybrid, which has a bonus of
11 having a purely electric option,
12 albeit a smaller traveling distance
13 than your typical pure electric
14 vehicles. And I may have considered
15 buying a purely electric vehicle, but
16 I knew that it would be impossible for
17 me to charge the EV battery on a
18 regular basis while living in my home
19 in Philly.

20 I live in a rowhome with
21 street parking on a very narrow street
22 in Fishtown. I think that cities like
23 Philadelphia can be ideal places for
24 electric vehicles. The smaller
25 distances that you're traveling, the

12/2/2022

1 frequency of which you're driving and
2 able to park and charge make it an
3 obvious choice. Even with my hybrid
4 EV battery with a range of only 17
5 miles, I would be able to do most of
6 my driving on electric battery purely
7 because -- and because I have solar
8 panels on my house, those electric-
9 powered miles would be mostly fossil
10 fuel-free.

11 However, the closest charging
12 station to me is about three blocks
13 away, and I would have to go there,
14 charge my car for a few hours and then
15 move it to find street parking. And I
16 don't know how that charging station
17 sources its power. And also, I would
18 have to pay for it additionally to my
19 open power. So I rarely use it.

20 Many streets are like mine
21 with very narrow parking on one side,
22 so a private charging station like,
23 for example, the ones that were in the
24 former EV parking plan isn't really
25 ideal. Grocery stores and other

12/2/2022

1 locations that offer charging stations
2 now just don't have enough of them for
3 the growing EV market. There's very
4 rarely a time when I can go to a
5 grocery store and have one of those
6 stations for me to charge my car while
7 I'm shopping.

8 I've seen other neighbors
9 solve this issue by running simple
10 extension cords out of their homes to
11 their cars, which they're able to park
12 in front of their homes occasionally.
13 And this obviously isn't an ideal
14 solution for anyone, for the driver,
15 for the pedestrians and probably for
16 anybody else in the City. But even
17 that is not an option for the way that
18 my house is situated.

19 More publicly-accessible
20 chargers associated with street
21 parking would be ideal. It would
22 be -- one option is just to go to a
23 place and charge your car, but most of
24 the parking in my neighborhood is
25 street parking. Even if you're going

12/2/2022

1 to a store and having chargers that
2 are associated with that street
3 parking would be amazing.

4 I've worked with groups
5 around the City who are concerned with
6 air quality caused by fossil fuel
7 refineries and with the impacts of
8 climate change. Increasing the amount
9 of EVs in the City is an important
10 facet of addressing both of these
11 issues. And I'm really excited that
12 Philadelphia's taking this on to
13 support the infrastructure and make it
14 possible for everyone who wants to
15 participate in owning an electric
16 vehicle to be able to. Thank you.

17 COUNCILMAN OH: Thank you
18 very much. Thank you for sharing kind
19 of the reality of a resident dealing
20 with this situation in our City. We
21 deal a lot with theory. It's been a
22 couple of years since we've heard from
23 the folks on the street, so I
24 appreciate the update with what's
25 going on.

12/2/2022

1 I'll ask the Committee does
2 anyone have a question for this
3 witness?

4 (No response.)

5 COUNCILMAN OH: It does not
6 seem so. So thank you very much for
7 your testimony.

8 And I'll ask the Clerk to
9 call our last panel.

10 MS. NUTTING: Thank you very
11 much.

12 COUNCILMAN OH: Thank you.

13 THE CLERK: Our last panel is
14 Robert Graff and Corrine O'Connor.

15 COUNCILMAN OH: Are both
16 witnesses present and available?

17 MS. O'CONNOR: Yes.

18 COUNCILMAN OH: Okay. I hear
19 the voice of Deputy Executive Director
20 Corrine O'Connor. Is Robert Graff
21 available?

22 MR. GRAFF: Yes, I'm here as
23 well. Thank you.

24 COUNCILMAN OH: Okay. I'm
25 going in the order that is on my sheet

12/2/2022

1 here, so I will ask Corrine O'Connor
2 to go first and identify herself and
3 provide us with your testimony. Thank
4 you.

5 MS. O'CONNOR: Thank you.
6 Good morning. My name is Corrine
7 O'Connor, and I'm the Deputy Executive
8 Director at the Philadelphia Parking
9 Authority. I'd like to thank the
10 members of the Committee for allowing
11 me to testify today. I would also
12 like to thank Councilman Oh for
13 introducing this resolution.

14 So in 2013, the Authority was
15 tasked with the installment of signage
16 for designated electric vehicle spaces
17 throughout the City of Philadelphia.
18 The spaces were installed in
19 residential areas in front of specific
20 houses and once the owner of residence
21 met several requirements set by
22 legislation, they were installed.

23 For example, the owner needed
24 to have a certified electrician
25 install the charging infrastructure

12/2/2022

1 along with providing proof of
2 ownership of it and the electric
3 vehicle. In 2018, 67 spaces existed
4 throughout the City of Philadelphia
5 for this specific use. And as of
6 2022, there are currently 42 spaces.

7 The Authority currently
8 receives around two to three requests
9 per year for these spaces in which we
10 must turn down our request. The
11 moratorium placed by Council has
12 resulted in a reduction in spaces in
13 the past few years, which would be a
14 result of residents either moving or
15 no longer owning electric vehicles.

16 The Authority continues to
17 monitor spaces that are installed and
18 looks forward to working with our
19 partners in the future on any
20 decisions made by the City pertaining
21 to this program or electric vehicle
22 charging stations. I'll be happy to
23 answer any questions.

24 COUNCILMAN OH: Thank you
25 very much.

12/2/2022

1 I'll ask the Chair and other
2 Committee members if you have any
3 questions for this witness.

4 (No response.)

5 COUNCILMAN OH: There appears
6 not to be any questions. I do have a
7 question.

8 In terms of the conversations
9 we were having about possibly
10 designating certain parking spaces
11 throughout the City as short-term EV
12 fast-charging stations, you know,
13 maybe a maximum of two hours or
14 something like that, just so they can
15 get to turn over one hour to 15
16 minutes.

17 We know you got to park and
18 it's not just to charge or maybe it is
19 just to charge, but I don't know. Is
20 there any conversation at the Parking
21 Authority about doing that type of
22 thing in connection with the City?

23 MS. O'CONNOR: So any
24 onstreet curbside parking, the
25 regulations are designated by City

12/2/2022

1 Council. So City Council comes along
2 and does an ordinance where it states
3 that every 10 blocks will be a public
4 charging station then, and decide that
5 we would be designated probably to
6 install that signage. Maybe the City
7 would come in and put in the
8 infrastructure, and then we could
9 patrol it and make sure there's
10 turnover. But it's not on the
11 Authority to create that regulation.
12 Normally, regulations are created and
13 then we go in basically and enforce
14 that regulation.

15 COUNCILMAN OH: All right.
16 Thank you very much. I'll then ask
17 Robert Graff to identify yourself and
18 to provide us with your testimony.

19 MR. GRAFF: Good morning,
20 Councilman Oh. My name is Robert
21 Graff. I until about a year ago led
22 the Office of Energy and Climate
23 Change Initiatives at the Delaware
24 Valley Regional Planning Commission.
25 While I was there as you may recall, I

12/2/2022

1 had the pleasure and honor of serving
2 on the EV Policy Task Force.

3 I now serve as a Senior
4 Technical Advisor for Rocky Mountain
5 Institute and the North American
6 Council for Freight Efficiency and
7 Electric Vehicle Charging Issues, from
8 the smallest vehicles to Class A
9 trucks. I actually was viewing the
10 Tesla release of the Semi last night
11 and the Executive Director from NACFE,
12 the North American Council for Freight
13 Efficiency was there.

14 I also serve as a
15 transportation subject matter expert
16 for Energetics, a clean energy
17 consulting firm based in Columbia,
18 Maryland, which so you know I've met
19 with Commissioner Rosati of the Fleet
20 Department and we presented him as
21 Energetics a proposal to assist in the
22 electrification of the Philadelphia
23 fleet. I also was interviewed for the
24 Grid Magazine article that Meredith
25 spoke about and for a recent article

12/2/2022

1 in the Philadelphia Inquirer about
2 this.

3 I haven't actually prepared
4 formal testimony, I was just notified
5 of this a few days ago, but I wanted
6 to bring my expertise and knowledge to
7 the City and offer it moving forward.
8 For instance, right now I'm in the
9 midst of completing a document called
10 Planning, Zoning and Permitting
11 Guidance for Electric Vehicle Charging
12 Deployment, which is being jointly
13 done by Rocky Mountain Institute and
14 the Interstate Council on Renewal
15 Energy or IREC, Interstate Renewable
16 Energy Council, I think, yes. And in
17 that capacity, we've been looking at
18 the very same issues that you've been
19 discussing.

20 I think one thing to recall
21 is that we're going through a
22 tremendously profound transformation
23 in a very short period of time, trying
24 to move from the petroleum-based,
25 internal combustion-based

12/2/2022

1 transportation economy to an electric
2 vehicle economy. The use of the
3 vehicles is essentially the same while
4 they're operating. However, the
5 fueling of the vehicles is really
6 where the challenge comes in. And as
7 I think we all noted in the work we
8 did in the Electric Vehicle Policy
9 Task Force, it's primarily a parking
10 issue.

11 And as Meredith noted, it's
12 desirable by most people to be able to
13 park very -- charge while they work
14 and prefer not to walk, as she had
15 noted three blocks is a distance that
16 she had preferred not to walk to
17 charge a vehicle, and that's a very
18 high bar to try to meet.

19 I think it's also important
20 to remember that there are many other
21 ways to have electric vehicles reduce
22 emissions other than in the private
23 automobile. There are heavy-duty
24 vehicles, all the delivery vehicles.
25 The buses in the City emit far more

12/2/2022

1 than the cars. There's also
2 opportunities that have been in
3 low-income neighborhoods particularly.
4 A lot of the drivers of ride-hail
5 vehicles are low income and live in
6 low-income neighborhoods.

7 RMI, Rocky Mountain
8 Institute, did some work in California
9 in the Bay area trying to make sure
10 that there was charging available,
11 fast-charging available for ride-hail
12 drivers who put a lot of miles on
13 their vehicles. They put maybe a
14 couple of hundred miles a day on their
15 vehicles, and to move those electric
16 is much more beneficial to the City as
17 a whole, the community as a whole than
18 reducing 15, 20 miles a day by
19 electric.

20 So I think we have to
21 concentrate on where the investments
22 are made to reduce emissions. Private
23 vehicles may not be the very first
24 space where the City particularly
25 would want to invest its resources.

12/2/2022

1 Also, just for reference -- well, back
2 up a second. Also, I think it's
3 important to remember that every
4 vehicle trip has a destination. So
5 those who can't charge at home if
6 they're driving to their workplaces or
7 if they're driving for shopping or to
8 visit state parks or whatever, a lot
9 of those destinations need to have
10 where it may be easier to provide
11 charging that it is in a densely-
12 packed urban area also need to be
13 considered.

14 Also, we also at Energetics
15 we did some work that I don't
16 believe -- I'm not sure is public
17 availability for the city of
18 Wilmington, Delaware, which although
19 it's a smaller city, it's a very
20 densely-packed city, very low-income
21 city and has very little offstreet
22 parking, and they've done some
23 excellent work looking into this
24 issue. I will be happy to connect
25 anyone at the City with the people

12/2/2022

1 working at the city of Wilmington to
2 see if you can get a copy of that work
3 because we've looked into this a lot.

4 I also, so for onstreet --
5 for public charging, right, which is
6 sort of what we're talking about here,
7 there's really three pieces of this.
8 There's sort of offstreet parking and
9 onstreet parking, right. So offstreet
10 parking is something that I believe
11 the City needs to work on permitting
12 and encouraging. But in my view,
13 there's very little role for the City
14 to play in actually going beyond that.
15 That's a private sector kind of
16 endeavor.

17 One challenge with that,
18 however, is that as I think Councilman
19 Squilla mentioned earlier the market
20 itself will select the most profitable
21 locations for those chargers, which
22 may be different than the ones that
23 serve the community as a whole best.

24 RMI is working on a project.
25 We are hoping to get funded that would

12/2/2022

1 start in the middle of this year that
2 would have a component to help
3 municipalities understand where they
4 need charging, which will have
5 probably different levels of profit
6 for investors in that charging and how
7 to potentially work with permitting to
8 say, well, if we're going to allow you
9 to put this charger here, we have a
10 high revenue possibility, we're also
11 going to require you to put chargers
12 in this location.

13 There's also opportunities to
14 co-locate other clean mobility
15 features with charging such as bike
16 share, potentially requiring covering
17 bus stops within a certain distance of
18 your charging stations to make public
19 transit more attractive. So there's
20 other opportunities that we need to
21 think beyond simply if we just change
22 all internal combustion engines to all
23 electric engines, we will have done
24 some things, but there's a lot of
25 opportunities to improve beyond that

12/2/2022

1 and I think that we need to be aware
2 of that.

3 So sorry, regarding public
4 charging we have the offstreet and the
5 onstreet. The onstreet, there's sort
6 of -- there's two issues. Let me
7 just, if you'll bear with me, I can
8 read about a page from this draft
9 document that I'm in the midst of
10 putting together on onstreet parking,
11 which is not yet completed. It will
12 be done by Monday. I'll make sure the
13 City gets a copy of this when it's
14 completed and approved the beginning
15 of next year.

16 So municipalities need to
17 consider two primary onstreet parking
18 use cases: In commercial districts
19 with limited offstreet parking,
20 daytime visitors may wish to charge.
21 In residential areas with limited
22 offstreet parking, residents may wish
23 to charge onstreet overnight. In the
24 commercial areas where demand for
25 onstreet charging is likely to be

12/2/2022

1 greatest in the more developed
2 commercial areas, multiple authorities
3 typically control curb access or
4 construction on public property.

5 These include public works, streets,
6 water and sewer authorities, utilities
7 and transit agencies.

8 Furthermore, onstreet
9 charging requires close coordination
10 among authorities within departments
11 because there can be many competing
12 uses for the curb, such as commercial
13 delivery, bike lanes, transit stops
14 and valet parking. In addition, there
15 may be multiple buried utilities,
16 water, sewage, electricity, natural
17 gas, communication cable, steam pipes
18 and so forth.

19 Coordination among the many
20 entities can raise the cost of this
21 type of installation and result in a
22 very long permitting process. These
23 challenges have slowed the
24 installation of curbside charging,
25 particularly in commercial areas of

12/2/2022

1 larger cities. Other issues compound
2 the challenge. For instance, cities
3 that want all utility infrastructure
4 to be underground may require costly
5 trenching to provide power for the
6 charging stations. In addition,
7 projects may be faced with high
8 electric infrastructure costs that
9 cannot be covered by rate-based or
10 rate-based by the utility.

11 Onstreet charging potentially
12 can be charged at a lower cost --
13 sorry, onstreet charging using poles,
14 existing utility poles and streetlight
15 poles can potentially be installed at
16 a lower cost and comparable ground-
17 mounted charging. However, there was
18 a recent study that's referenced in
19 this document on pole-mounted electric
20 vehicle charging that was done by the
21 World Resources Institute last year
22 that I participated in, that indicates
23 that it's really not much spare of
24 electricity from street lighting to do
25 that. So that's not necessarily a

12/2/2022

1 solution.

2 And then regarding
3 residential areas, providing onstreet
4 parking without a dedicated offstreet
5 location to park their vehicles is
6 among the most challenging use case
7 for electric vehicle charging. This
8 is in part because it is often as much
9 a vehicle parking issue as a vehicle
10 charging issue, particularly in the
11 most populous areas of cities or in
12 older cities laid out before the
13 ubiquity of automobiles.

14 Residential areas may be
15 densely populated with little access
16 to offstreet parking or less dense
17 areas with both offstreet and onstreet
18 options. The areas with limited
19 parking may require more
20 considerations in areas with plentiful
21 parking.

22 Interestingly, as Meredith
23 testified, many EV owners without
24 offstreet parking run electric
25 extension cord from a home 110-volt

12/2/2022

1 outlet to charge their EV at the curb.
2 This presents an unambiguous hazard to
3 pedestrians and other sidewalk users
4 as the cord must cross the sidewalk
5 either on or elevated above ground
6 level.

7 A few municipalities included
8 Seattle, Washington and Portland,
9 Oregon have addressed this hazard by
10 allowing residents to extend 110-volt
11 extension cords across the sidewalk
12 only while actively charging and use
13 an ADA-compliant cord cover. However,
14 their concerns about compliance and
15 enforcement, cities may be concerned
16 about liability if cords are not
17 properly configured.

18 Also, New York City and Los
19 Angeles are doing pilots on onstreet
20 charging. I can connect you with the
21 individuals particularly in New York
22 City because I know where I have a
23 colleague at RMI who's working
24 directly on that. I know Los Angeles
25 has had challenges with theft of the

12/2/2022

1 copper from the charging cables, and
2 anecdotally including theft by other
3 EV charging companies that just want
4 to cut the cables and install them on
5 their own chargers because they're
6 very valuable. As you know, they lock
7 up copper in Home Depot and Lowe's
8 now.

9 So I'd be happy to answer any
10 questions. As those who know me in
11 this area know I can talk about this
12 forever, so I would just prefer to
13 answer questions if you've got any.
14 Thank you.

15 COUNCILMAN OH: Thank you
16 very much, very thorough. And I
17 recognize you now that I see you on
18 the virtual monitor here. Yes, I do
19 remember you and how very thorough you
20 are, and I thank you for that. And
21 it's very encouraging to hear you're
22 already working on things.

23 So let me just ask the Chair
24 and other Committee members if you
25 have any questions for this witness?

12/2/2022

1 (No response.)

2 COUNCILMAN OH: It appears we
3 do not. And I don't have any
4 questions other than the fact that I
5 appreciate your information and
6 willingness to provide all that
7 documentation to us for us to peruse.
8 I would love to see the documentation.
9 The person of course is Chris
10 Puchalsky, who is the person on the
11 ground for the City. They're the ones
12 doing this. I just like to be
13 informed about what's going on.

14 And so, with that I believe
15 that you are the last witness. That
16 concludes our hearing. And I want to
17 thank you and all the other witnesses
18 for your participation.

19 I'll ask the Clerk if there
20 are any public comment that we might
21 have. I don't think so. I didn't see
22 that in the agenda for today.

23 THE CLERK: There's no public
24 comment.

25 COUNCILMAN OH: Okay. Thank

12/2/2022

1 you very much.

2 So with that, this concludes
3 the business before the Committees on
4 Streets and Services and Global
5 Opportunities and the
6 Creative/Innovative Economy. So thank
7 you very much and we are recessed to
8 the call of the Chairs. Everybody
9 have a great day. Thank you.

10 (Joint Committees on Streets
11 and Services and Global Opportunities
12 and the Creative/Innovative Economy
13 concluded at 11:17 a.m.)

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12/2/2022

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I, hereby certify that the
proceedings and evidence noted are contained
fully and accurately in the stenographic
notes taken by me in the foregoing matter,
and this is a correct transcript of the
same.

TANEHA CARROLL
Court Reporter - Notary Public

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12/2/2022

23:8 24:7 31:19 32:4 billion 43:7 bills 22:21 Bipartisan 12:5 32:1 43:10 46:15 bit 16:19 35:16 47:13 black 17:4 blocks 58:12 65:3 68:15 Bonner 36:22 37:1, 3, 8, 9 51:21 54:13 56:6, 12 bonus 57:10 booth 40:6 bought 57:9 box 17:23 brainstorming 17:10 bridges 25:11 brine 55:9, 12, 19 bring 53:11 67:6 bringing 42:15 broad 11:15 42:5 broader 45:14 BROOKS 1:1 5:4, 5 build 34:18 36:4 Building 34:14 buildings 44:12 bunch 19:6 buried 74:15 bus 72:17 buses 68:25 business 80:3 businesses 44:2, 12 50:8 buying 57:15 < C > cable 74:17 cables 78:1, 4 California 69:8 call 4:11 8:21 18:8 36:19 61:9 80:8 called 6:15 37:4 55:8 67:9 calling 16:7 30:23	capability 48:23 capacity 40:1 41:5 67:17 capital 23:8 49:8 capture 55:21 car 18:2, 17 25:12 33:12, 14 58:14 59:6, 23 carbon 11:11, 19 39:3 care 51:17 career 51:11 carefully 23:2 CARROLL 81:12 cars 7:11 49:24 59:11 69:1 cartoon 32:4 case 46:1 76:6 cases 73:18 caused 60:6 cautionary 45:15 cell 55:15 centers 17:12 44:11 CEO 53:9 certain 64:10 72:17 certainly 26:2 30:16 54:8 certification 52:23 81:19 certified 62:24 certify 81:1 certifying 81:23 cetera 25:11 chains 54:19 CHAIR 1:1 15:5 33:23 34:10 36:15 64:1 78:23 Chairman 2:18 7:1 8:25 9:1 37:12 50:20 53:20 Chairperson 5:13, 20 Chairs 4:20 80:8 challenge 45:1 68:6 71:17 75:2	challenges 10:11, 14 42:24 74:23 77:25 challenging 76:6 change 8:15 60:8 65:23 72:21 changed 7:7 changes 7:9 changing 27:6 charge 13:21 14:4 15:15 18:3 23:25 26:16 53:20 57:17 58:2, 14 59:6, 23 64:18, 19 68:13, 17 70:5 73:20, 23 77:1 charged 75:12 charger 12:20 14:3 18:4 23:18 24:1 72:9 chargers 11:24, 25 12:3 13:19, 20 14:8 16:11 18:11 26:24 39:12 59:20 60:1 71:21 72:11 78:5 charging 7:23 8:7, 18 10:13, 20 11:4 12:2, 23 15:11 16:17 17:8, 20 20:6 21:23 22:11, 24 23:14, 16, 17 25:2, 9 26:23 29:11 31:10 35:19 39:8, 14 41:19 42:3, 7, 25 43:14, 20, 24 44:8, 20, 25 45:9, 22, 23 47:18 50:11 51:18 53:1 58:11, 16, 22 59:1 62:25 63:22 65:4 66:7 67:11 69:10 70:11 71:5 72:4, 6, 15, 18 73:4, 25 74:9, 24 75:6,	11, 13, 17, 20 76:7, 10 77:12, 20 78:1, 3 chat 4:2, 6 21:10 chemistries 54:20 chemistry 52:16 55:1, 3 Chevy 49:24 China 54:18 choice 58:3 chooses 40:23 choosing 41:10 42:4 Chris 8:23 15:6 36:18 40:21 42:8 44:5 54:13 79:9 Chris's 47:12 Christopher 9:4 52:8 CINDY 1:1 circle 27:21 circling 29:24 cited 18:10 cities 57:22 75:1, 2 76:11, 12 77:15 citizens 42:3 CITY 1:1 2:24 7:18 8:7, 15 9:16 10:17 12:1 13:12 14:10, 16, 18 15:12, 17 16:10, 13 17:14 19:12 26:13 28:23 33:7 40:17 42:7, 15, 18 43:1 45:1 46:25 47:8 57:4 59:16 60:5, 9, 20 62:17 63:4, 20 64:11, 22, 25 65:1, 6 67:7 68:25 69:16, 24 70:17, 19, 20, 21, 25 71:1, 11, 13 73:13 77:18, 22 79:11 City-owned 17:12 City's 9:19	41:25 citywide 15:9 Class 66:8 Clean 13:10 37:18 38:21 43:18 48:3 53:12 66:16 72:14 clear 23:15 clearly 43:23 CLERK 2:17 4:16, 21, 24 5:3, 7, 10, 13, 17, 22, 25 6:4, 7 8:20, 22 34:7 36:19, 21 61:8, 13 79:19, 23 climate 60:8 65:22 close 54:8 74:9 closest 58:11 coalition 48:12 Co-Chair 6:18 Code 34:14 35:9 collaborate 40:16 45:7 collaboratives 40:11 colleague 77:23 colleges 51:12 co-locate 72:14 Columbia 66:17 combustion 72:22 combustion- based 67:25 come 30:1 55:12 65:7 comes 55:9 65:1 68:6 coming 7:7, 22 23:7 26:1 28:12 30:18 comment 79:20, 24 commentary 44:6 comments 3:24 commercial 28:6 29:4 39:6 45:23 73:18, 24 74:2, 12, 25	commercially 22:6 Commission 35:6, 10 45:17 47:20 65:24 Commissioner 66:19 commitment 38:21 commitments 12:23 Committee 2:4, 5, 9, 10 4:16 5:17 6:14, 18, 20 9:2 15:2 33:22 37:13 38:15 44:7 50:21 61:1 62:10 64:2 78:24 COMMITTEE S 1:1 2:25 3:7 7:2 80:3, 10 common 10:21 Commonwealth 25:17 communication 74:17 communities 12:25 19:13 38:4 39:2, 11 41:16 42:17 43:9 46:25 47:9 50:12 53:14 community 16:20 17:8 35:11 42:19 46:8 47:2 48:11 51:12 69:17 71:23 community- based 16:17 43:18 companies 53:25 78:3 company 26:23 37:22 55:6 56:3, 10 comparable 75:16 competing 74:11 competitive 43:7 48:11
---	---	---	--	---	---

12/2/2022

completed 73:11, 14	control 74:3 81:22	20:11, 25 21:5, 14 23:11	curbside 44:10 64:24 74:24	densely-packed 70:20	Discretionary 13:2
completing 67:9	convenience 10:23	24:22 26:8	current 2:23 11:3 35:9	Department 9:14 13:9, 18, 25 14:6 39:24 66:20	discuss 36:9 40:11
compliance 77:14	convenient 33:16	27:15 30:24 33:19 34:3, 7, 9, 11, 12 36:1, 12, 16, 23 37:2	currently 2:20, 25 13:25 24:15 28:9 39:5, 23 63:6, 7	departments 74:10	discussing 67:19
comply 4:5	conversation 26:18 35:25 64:20	50:18, 24 53:16 55:25 56:8, 16 60:17 61:5, 12, 15, 18, 24 62:12	customer 38:19 45:23 46:20	deployment 12:20 32:12 37:19 39:15 67:12	discussion 26:6, 12 35:12 47:12 52:8
component 11:13 72:2	conversations 25:15 64:8	63:24 64:5 65:15, 20 71:18 78:15 79:2, 25	customers 22:6 38:11 39:1, 7, 18 40:25 41:10 44:14 45:21 46:22 50:8	depot 78:7 depots 39:25 Deputy 61:19 62:7	discussions 42:5
compound 75:1	cooperation 53:24	Councilmember 4:21, 24 5:3, 7, 10, 22 6:1, 8, 12, 19, 22, 24 9:25 10:1 17:2 21:6 23:24 27:8 31:13	cut 78:4	description 20:4	disrupt 42:10
concentrate 69:21	coordinate 20:5 30:17	COUNCILWO MAN 1:1 5:5	< D >	designated 16:8 29:2 62:16 64:25 65:5	disrupted 8:10
concern 32:16	coordinates 9:10	counties 37:24	Daily 3:9	designating 64:10	distance 57:12 68:15 72:17
concerned 60:5 77:15	coordination 42:13 74:9, 19	country 31:25	date 41:6	designed 38:18	distances 57:25
concerns 24:10 25:7 77:14	coordinator 42:16	couple 4:13 21:18 27:16, 17 47:11 60:22 69:14	DAVID 1:1 day 7:9 69:14, 18 80:9	desirable 68:12	distinguishing 10:13
concession 17:15 26:22	copper 78:1, 7	COVID 8:11	days 67:5	destination 70:4	distribution 37:22 38:10 41:3
concluded 80:13	copy 71:2 73:13	covered 75:9	DC 14:3 18:10	destinations 70:9	distributors 24:25
concludes 14:18 79:16 80:2	cord 76:25 77:4, 13	covering 72:16	deal 40:21 60:21	details 23:22	districts 73:18
conduit 35:20	cords 59:10 77:11, 16	create 31:5 65:11	dealing 7:8 60:19	determine 39:25	document 67:9 73:9 75:19
configured 77:17	Corporation 53:19	created 65:12	daytime 73:20	determined 7:19	documentation 79:7, 8
congestion 28:22 32:23	correct 81:1	Creative 2:11	DC 14:3 18:10	develop 13:10 47:18	DOE-funded 55:16
CONNECT 32:25 70:24 77:20	corridors 16:8, 9	CREATIVE/IN NOVATIVE	deal 40:21 60:21	developed 52:23 74:1	doing 8:14 51:3 52:1 64:21 77:19 79:12
connection 64:22	Corrine 61:14, 20 62:1, 6	COURT 81:13	decide 65:4	developers 36:3	dollars 45:25
consenting 3:20	cost 10:23 35:23 43:13 46:9 74:20 75:12, 16	cover 24:4 43:12 77:13	decision- making 9:11	determining 39:25	dominating 54:18
consider 48:4 73:17	costly 75:4	covered 75:9	decisions 63:20	develop 13:10 47:18	donuts 22:20
considerations 76:20	costs 24:3 25:22 38:5 47:20 75:8	COVID 8:11	dedicated 14:11 20:16, 22 27:10 76:4	developing 42:12 52:22	DOT 16:2
considered 57:14 70:13	cost-sharing 47:21	create 31:5 65:11	definitely 30:12	development 32:12 34:23 35:11, 23 38:20 56:14	downward 38:8
constrained 21:9	COUNCIL 1:1 2:24 3:7 14:16 24:19 30:23 36:14 63:11 65:1 66:6, 12 67:14, 16	CREATED 65:12	Delaware 65:23 70:18	difference 40:23	dozen 13:19
construction 34:15 74:4	COUNCILMA N 1:1 2:2 3:23 4:9, 19, 25 5:15, 21 6:2, 5, 9, 11, 25 14:24 15:4 18:20 19:10	CREATIVE/IN NOVATIVE	delivery 68:24 74:13	different 71:22 72:5	draft 73:8
consulting 66:17		Cross 77:4	demand 8:15 10:12 39:12 73:24	difficult 19:4	drafted 21:20
contained 81:1		Crosstrek 57:10	demonstrated 11:15	direct 81:22	dramatically 41:11
continually 41:13		culminated 8:5	dense 10:16 76:16	directly 9:13 42:17 77:24	drinks 22:20
continue 41:11		curb 74:3, 12 77:1	densely 41:20 70:11 76:15	Director 9:5 56:13 61:19 62:8 66:11	drive 18:1 19:7 41:10
continues 63:16				Director's 9:6	driven 15:21
continuing 3:19 14:13 48:13					driver 59:14 69:4, 12
					driving 48:25 58:1, 6 70:6, 7
					Due 2:23
					DVRPC 40:18

12/2/2022

< E >	electrification 13:23 38:1 40:14 66:22	environment 8:17 38:3	40:25 42:4 44:14 46:25 49:13 50:14 52:7 60:9	facet 60:10 facilitate 44:21 facilities 16:9, 12 49:9	focus 16:14, 22 41:15
earlier 52:8 71:19	electrify 46:13	environmental 39:11	exactly 8:14	fact 23:16 31:7 79:4	focused 10:11
early 46:12	electrons 24:5	equipment 39:14 44:22	example 7:10 28:24 58:23 62:23	fair 25:21 26:5	folks 21:21 22:14 60:23
earth 55:10	elevated 77:5	equitable 40:12	exceeding 50:2	family- detached 41:18	following 2:20
easier 70:10	eliminate 54:21	equity 12:22	excellent 70:23	Fantastic 30:25	follows 2:23
Economic 56:14	Elizabeth 6:13	Especially 19:11 50:4 54:17	exchange 16:19	far 48:19 68:25	follow-up 13:17
economics 18:9 24:1	eloquently 53:10	essentially 23:3 68:3	excited 30:19 45:3 56:7 60:11	fascinating 55:24	footprints 39:3
economies 49:4, 10	embraced 11:17	established 38:17	Executive 61:19 62:7 66:11	fast 11:24 14:3, 8 18:11	Force 9:17, 22 10:3, 10, 19 11:14 17:3 27:9 42:1 44:16 66:2 68:9
ECONOMY 1:1 2:7, 11 5:19 7:9 53:13 68:1, 2 80:6, 12	emergency 2:24	establishing 11:3	exercises 17:6, 7	fast-charging 39:13 64:12 69:11	foregoing 81:1, 19
education 38:19 40:5, 6, 9 52:2	emissions 11:19 27:23 38:23 68:22 69:22	et 25:11	existed 63:3	feature 4:2, 6 21:11	foreseeable 41:8
Efficiency 66:6, 13	emphasizes 48:17	EV 7:11, 14, 19 8:6 9:17, 21, 23 10:7, 20, 22 11:14, 24 12:3, 14, 19, 23 13:19 14:12 20:6 21:23 22:24 24:24 25:20 26:2 29:11 30:1 34:19 35:19 38:12, 19 39:4, 8, 13, 19 40:6, 10, 19, 24 41:2, 14 42:1, 6, 25 43:13, 19, 24 44:3, 20 47:18 48:18, 23 50:10 57:17 58:4, 24 59:3 64:11 66:2 76:23 77:1 78:3	existing 35:1 40:1 75:14	features 72:15	forever 78:12
efficient 38:9	employees 50:9	expand 11:9	expansion 40:13	federal 12:7 32:9 43:8 50:5	form 26:22
efforts 42:10 44:21 47:7 48:3 54:16	employment 52:10 55:2	expect 12:16 48:12 50:3	expectation 3:18	fee 23:25 28:19 29:9	formal 16:25 67:4
eight 13:20	enable 17:17	expectations 50:2	expected 10:9 50:1	fed 16:5	format 24:18
either 17:14 54:21 63:14 77:5	enables 41:1	experience 57:2	expert 31:14 66:15	fee 23:25 28:19 29:9	formed 9:16
electric 7:11, 17 9:16 11:1 12:10 13:13 15:11 26:17 37:21 38:7, 10 41:10 53:1 56:25 57:3, 11, 13, 15, 24 58:6, 8 60:15 62:16 63:2, 15, 21 66:7 67:11 68:1, 8, 21 69:15, 19 72:23 75:8, 19 76:7, 24	encourage 9:18 18:5 45:12	expected 10:9 50:1	expertise 22:15 31:15 54:14 67:6	filed 47:19	former 58:24
electric 7:11, 17 9:16 11:1 12:10 13:13 15:11 26:17 37:21 38:7, 10 41:10 53:1 56:25 57:3, 11, 13, 15, 24 58:6, 8 60:15 62:16 63:2, 15, 21 66:7 67:11 68:1, 8, 21 69:15, 19 72:23 75:8, 19 76:7, 24	encouraging 71:12 78:21	evaluate 41:14	explaining 39:19	filling 16:6 18:17	Formula 12:11
electrical 19:14 52:18, 21	endeavor 27:14 71:16	events 40:5 52:3	explore 13:4 42:1 43:5 44:23 45:20	final 9:22 10:24 43:22	formulate 10:4
electrician 62:24	Energetics 66:16, 21 70:14	everybody 2:3 80:8	experts 8:4 39:21	finally 27:16 30:25 46:11	forth 74:18
electricians 52:24	energy 37:19 43:18 48:22 51:24 53:12 55:6 65:22 66:16 67:15, 16	EV-focused 40:8	expert 31:14 66:15	find 24:20 30:9 58:15	fortune 22:18
electricity 10:9 23:12, 15, 17 55:20 74:16 75:24	encourage 9:18 18:5 45:12	EV-ready 11:21 35:19, 21	expertise 22:15 31:15 54:14 67:6	finding 45:4	forward 14:13 26:7 34:22 42:10 43:3 44:19 45:8, 13 46:23 56:15 63:18 67:7
	enforce 65:13	evolving 10:8	exploring 39:19	firm 66:17	fossil 58:9 60:6
	enforcement 77:15	EVs 7:21 9:18 11:12 14:18 30:11 32:21 33:2	extension 59:10 76:25 77:11	first 8:21, 22 12:16 15:23 16:6, 14 49:23 50:20 62:2 69:23	found 3:11
	Engage 44:22		eyes 23:6 27:12	Fiscal 14:11	frankly 22:1
	engagement 14:14 47:2		< F >	Fishtown 57:22	Freight 66:6, 12
	engines 72:22, 23		faced 75:7	five 12:13	frequency 58:1
	enhancement 39:10			Fleet 13:9, 10, 13, 18, 24 14:1, 5, 6 20:17, 20 39:23 44:3 66:19, 23	Friday 1:1
	enjoy 50:13			fleets 39:9	front 59:12 62:19
	ensure 12:19			flip 40:15	frustration 27:24
	entities 9:11 22:12 74:20				fuel 13:14 16:7 49:16 60:6

12/2/2022

fully 46:4 81:1	going 8:6 15:7 18:2	Harrisburg 24:7 25:15	hosting 40:6, 9	incentivize 19:22 22:4	Innovative 2:11 7:20
fund 23:4	19:17, 18, 22	hazard 77:2, 9	hosts 44:23	44:3	Inquirer 3:9
funded 43:9	23:9 26:7	headquartering 56:2	hour 64:15	incentivizing 21:22 29:11	67:1
71:25	34:24 40:22	health 2:24	hours 13:21	36:2 39:14	install 14:7
funding 12:7,	47:3, 14 51:1	hear 42:15	22:24 58:14	include 10:22	17:19 26:24
17 13:1, 6	59:25 60:25	61:18 78:21	64:13	43:19 74:5	39:8 52:25
15:22 16:15	61:25 67:21	heard 22:2	House 48:1	included 3:7	62:25 65:6
17:22 23:8	71:14 72:8, 11	25:4, 5 30:7	58:8 59:18	12:9 77:7	78:4
25:14 31:18	79:13	40:20 44:5	households 33:10, 14	including 11:24 12:22	installation 21:22 22:11
32:9 43:8, 17	Good 2:2	52:7 60:22	houses 62:20	16:9 39:7	39:22 74:21,
funds 16:3	4:19 5:5, 15	hearing 2:4, 8,	humongous 54:6	40:5 53:25	24
31:23	6:9 8:24	16, 22 3:8, 15,	hundred 69:14	78:2	installed 11:25
funny 35:16	17:10, 11 41:5	16 5:2 6:15	Hybrid 57:10	income 49:20	18:12 62:18,
Furthermore 74:8	46:2 49:14	37:14 48:7	58:3	69:5	22 63:17
future 35:3	62:6 65:19	79:16	Hyundai 53:18, 20	incorporate 34:16	75:15
41:4, 8 42:6	government 32:10 37:10,	hearings 3:2,		increase 46:20	installing 43:13 44:19
52:7, 17 53:3,	17	6, 11 8:4	< I >	53:3 57:7	installment 62:15
5 63:19	Graff 61:14,	heavily 10:2	idea 19:2	increased 12:23	instance 67:8
	20, 22 65:17,	heavy-duty 68:23	29:19, 24 32:6	increasing 48:7 60:8	Institute 66:5
	19, 21	help 7:24	ideal 57:23	indicates 75:22	67:13 69:8
gain 45:10	grandfathering 11:2	19:18, 23	58:25 59:13,	individual 42:20	75:21
garages 11:21	Grant 13:2	20:15 21:2	21	individuals 41:17 50:7	Instructions 3:4
34:16, 18	43:8 48:11	35:3 72:2	ideas 53:4	77:21	insurance 30:3
gas 18:8, 15,	great 18:13	helped 10:4	identified 41:6	industrial 28:5, 15	Intelligencer 3:10
17 19:3, 5, 8	39:16 40:21	helping 23:4	42:18	industry 19:17	intended 43:23
22:16, 18, 25	49:18 50:6	39:1	identifies 27:20	31:22 48:17	interest 14:21
25:8, 12 38:22	80:9	Hi 8:24 56:21	identify 41:3	49:21	32:1 48:7
74:17	greater 11:5	high 49:8	44:9 54:19	Inflation 43:16	56:1
gearing 46:19	greatest 74:1	51:10 68:18	62:2 65:17	infographic 38:13	interested 45:5 46:22
general 30:15	greenhouse 38:22	72:10 75:7	image 4:15	information 45:10 47:13	52:15, 18
32:24	grid 41:3	higher 35:22	impact 10:15	51:4 56:13	54:25
generally 22:17 24:8	56:24 66:24	highlight 12:4	impacts 25:10	79:5	Interestingly 76:22
generate 32:22	grocery 17:24	highlights 11:20	60:7	informed 79:13	interim 48:21
generation 49:24	58:25 59:5	highways 12:8	implement 8:6	infrastructure 7:23 8:1 9:8,	internal 17:5
geothermal 55:7, 19, 21	ground 75:16	hire 14:10	implementation 40:19	13 12:6, 11, 14	46:19 67:25
getting 50:10	77:5 79:11	27:10 36:7	implemented 20:2	24:14 25:9, 22	72:22
Gilmore 5:11,	groups 60:4	hired 20:12	important 31:12 33:4	32:1 38:20	interrupted 7:4
23	grow 41:11	historic 46:12	37:14 49:7	43:10, 14	interstate 16:18 67:14,
Give 40:15	growing 10:12	holding 5:1	60:9 68:19	45:15 46:16	15
GLOBAL 1:1	41:12 59:3	home 41:19	70:3	47:21 57:7	interstates 16:12
2:6, 10 5:18	guess 15:9	57:18 70:5	impossible 57:16	60:13 62:25	interviewed 66:23
15:17 19:1	guidance 13:11 67:11	76:25 78:7	improve 38:3	65:8 75:3, 8	introduce 21:19
54:16 80:4, 11		homes 41:18	72:25	Initiatives 9:6	
glove 48:10	< H >	59:10, 12	incentive 39:10 45:22,	65:23	
Go 6:5 17:22	half 45:24	honest 26:20	24	Innocenzo 53:9	
18:18 22:22	hall 8:3	honor 66:1	incentives 23:10 39:5		
31:14, 23	hand 48:10	hooking 23:25	45:25 46:14		
34:24 47:14	55:21	hope 20:4	47:22		
58:13 59:4, 22	happening 24:23	24:19 27:6			
62:2 65:13	happy 14:22	20:12 47:12			
goal 11:13	21:1 50:16	hoping 20:8			
38:24	63:22 70:24	71:25			
goals 13:15	78:9	host 44:8			
goes 29:25					

introducing 62:13	kind 21:9 22:4, 21 27:18, 23 32:5 48:2 51:14 60:18 71:15	legislative 48:6 51:5	long-term 11:8 14:14	manufacturers 24:25	mid-September 46:4
inversion 44:3	23 32:5 48:2	legislators 45:12	38:5 54:9	mapping 17:6	midst 67:9
invest 24:13 69:25	51:14 60:18 71:15	legitimately 28:3	look 14:13 15:19 17:14 23:1 27:11 30:22 32:3 35:8	MARK 1:1	73:9
investing 32:10 33:1	knew 57:16	lessons 45:11	23:1 27:11 30:22 32:3 35:8	market 47:3 49:5, 7, 16, 20 50:3 59:3 71:19	Mike 53:10
investments 69:21	knocked 29:22	Level 13:19 14:3, 7 18:4 45:21 47:16 53:13, 24 77:6	looked 30:2 31:19 32:8 34:14 35:13, 14 71:3	marketplace 32:7	miles 19:7 58:5, 9 69:12, 14, 18
investors 72:6	19:3 23:21	levels 32:8 72:5	34:14 35:13, 14 71:3	Maryland 66:18	million 12:13, 19 45:25
invited 3:13 56:22	26:4, 9 27:18 28:1, 13, 25 30:18 31:6, 17 32:4, 11 34:1 38:7 44:25 48:16 49:12 50:25 51:13, 18 53:8, 10 54:7, 15 58:16 64:12, 17, 19 66:18 77:22, 24 78:6, 10, 11	LG 53:25 54:2	looking 19:11 27:22 29:16 30:15 31:18 46:6 52:12 55:2, 7, 15, 17 67:17 70:23	matter 31:14 39:20 66:15 81:1	mind 10:18 46:10
inviting 9:2		liability 30:4 77:16	27:22 29:16 30:15 31:18 46:6 52:12 55:2, 7, 15, 17 67:17 70:23	maximum 64:13	mindful 19:15
involve 35:10		lifespan 50:1	looks 34:4 63:18	mean 16:20	mine 58:20
involved 24:20 36:8 51:14		lifetime 52:9 55:1	Los 77:18, 24	means 81:21	minutes 4:14 14:4 18:18 64:16
IRA 46:16 50:5		lighting 75:24	lot 7:5, 6 27:3 28:22, 24 29:12, 21 30:8 32:17 35:22 45:2 60:21 69:4, 12 70:8 71:3 72:24	mechanic 52:6	mobility 25:23 72:14
IREC 67:15		limited 26:16 73:19, 21 76:18	28:22, 24 29:12, 21 30:8 32:17 35:22 45:2 60:21 69:4, 12 70:8 71:3 72:24	meet 8:15 41:18 46:7 53:18 68:18	model 18:8, 16
ISAIAH 1:1 6:1		liquid 55:9	29:12, 21 30:8 32:17 35:22 45:2 60:21 69:4, 12 70:8 71:3 72:24	meeting 2:25 3:14, 20 10:12 38:6	moment 40:15
issue 23:12 30:22 31:12 32:17, 19 48:16 54:15 59:9 68:10 70:24 76:9, 10	known 9:9 13:3	list 29:22	45:2 60:21 69:4, 12 70:8 71:3 72:24	meetings 8:3, 4 44:16	Monday 73:12
issued 9:23	Korea 53:17	lithium 31:1, 2 54:10, 17, 22 55:18	lots 17:19 19:20	meets 12:20	money 16:1 17:21
issues 20:7 30:1, 4, 15, 25 32:21 41:5 47:4 60:11 66:7 67:18 73:6 75:1	< L >	lithium-like 31:5 54:5	love 56:9 79:8	member 6:7 30:14	monitor 63:17 78:18
items 51:18	ladder 32:13	little 16:19 35:16 47:13 70:21 71:13 76:15	low 11:11 49:15, 19 69:5	Members 3:23 4:3, 12 7:2 9:1 15:2 33:23 37:12 38:14 44:6 50:21 62:10 64:2 78:24	month 12:17 20:7
its 7:20 13:1, 13 16:3 48:5 49:22 58:17 69:25	landfill 48:20	live 41:20 57:20 69:5	lower 75:12, 16 50:12	mentioned 15:14 32:20 71:19	moratorium 63:11
	large 14:17 49:8	living 57:18	lower-income 50:12	member 6:7 30:14	morning 2:3 4:20 5:6, 16 6:10 8:25 29:2 62:6 65:19
	larger 24:9 25:14 29:25 75:1	Liz 2:14	Lowe's 78:7	Members 3:23 4:3, 12 7:2 9:1 15:2 33:23 37:12 38:14 44:6 50:21 62:10 64:2 78:24	Motor 53:19
	Lastly 14:10	local 9:12 14:14 32:17 40:17 41:2 44:1 53:13	low-income 69:3, 6 70:20	mentioned 15:14 32:20 71:19	Mountain 66:4 67:13 69:7
	law 2:19 12:6 32:1, 5 43:11 46:16	long 26:15 31:9 49:3, 25 74:22	lucrative 49:7	member 6:7 30:14	mounted 75:17
	laid 76:12	longer 29:8 48:24 63:15	luxury 49:14	member 6:7 30:14	move 16:16 33:24 42:10 43:3 45:12 52:13 58:15 67:24 69:15
	layman's 38:15	location 1:1 72:12 76:5	< M >	Members 3:23 4:3, 12 7:2 9:1 15:2 33:23 37:12 38:14 44:6 50:21 62:10 64:2 78:24	moved 4

12/2/2022

Municipal 13:10, 22, 23 20:20 44:11 municipalities 39:7 40:17 44:18 45:8 72:3 73:16 77:7	4 22:9 23:9 40:20 48:10 new 11:20, 24 12:2, 10 20:13 30:18 32:13 34:15, 23 35:2, 18 36:7 43:13 77:18, 21 News 3:9 41:5 46:2 night 29:1 66:10 Nissan 49:25 NOFO 13:5 Normally 65:12 North 66:5, 12 Northeast 18:12 Notary 81:13 note 3:25 6:21 43:15 56:1 noted 42:9 68:7, 11, 15 81:1 notes 81:1 Notice 13:5 notices 3:8 notified 67:4 notwithstandin g 35:24 November 12:5 number 16:8 41:9 43:5 49:1 numbers 31:21 numerous 32:10 52:3 Nutting 36:22, 25 37:4 56:18, 21, 22 61:10	43:3 45:14 46:21 59:1 67:7 Office 7:25 9:7, 15 13:7 14:1 29:15 65:22 off-script 47:14 offstreet 70:21 71:8, 9 73:4, 19, 22 76:4, 16, 17, 24 OH 1:1 4:24, 25 5:20, 21 6:19, 24, 25 9:1, 25 14:24 21:5, 14 23:11 24:22 26:8 27:15 30:24 33:19 34:3, 7, 11 36:16, 23 37:2 50:18, 24 53:16 55:25 56:8, 16 60:17 61:5, 12, 15, 18, 24 62:12 63:24 64:5 65:15, 20 78:15 79:2, 25 OIC 51:25 OIT 14:2 20:18 Okay 27:15 30:24 37:2 61:18, 24 79:25 old 32:4 older 76:12 once 48:24 49:4 62:20 ones 18:21 31:20 58:23 71:22 79:11 ongoing 10:8 23:2 26:6 27:13 online 7:22 onstreet 64:24 71:4, 9 73:5, 10, 17, 23, 25 74:8 75:11, 13 76:3, 17 77:19 open 12:17 23:6 27:12, 20 39:2 43:11 58:19 opened 46:3 operate 49:11	operating 45:5 68:4 operations 38:24 46:19 operators 39:13 opinion 51:20 OPPORTUNIT IES 1:1 2:6, 10 5:18 11:4 17:16 40:12 43:6, 17 53:12 69:2 72:13, 20, 25 80:5, 11 opportunity 13:5, 6 14:20 37:13 38:2 50:15 55:24 option 41:23 57:11 59:17, 22 options 13:14 33:8 39:19 41:14 42:2, 13 44:24 45:16 76:18 order 4:5 6:16 15:25 16:2 61:25 ordinance 65:2 Oregon 77:9 organizations 7:25 14:15 52:1 oTIS 9:9, 10 outlet 77:1 outlined 13:15 outlived 49:25 outreach 40:4 outside 54:17 57:8 overall 15:17 46:9 overburdened 12:25 overlap 16:21 20:21 overnight 30:6, 10 73:23 oversee 14:12 oversees 9:14 overwhelmingly 47:24 owner 62:20, 23 owners 25:20 26:2 76:23	ownership 44:24 56:25 63:2 owning 45:5 57:3 60:15 63:15 < P > packed 70:12 page 40:16 73:8 paid 28:16 pandemic 7:5, 8 27:5 29:23 30:3 42:9 48:2 panel 8:21, 22 33:25 36:20, 21 51:1 61:9, 13 panels 26:10 58:8 park 22:5 28:14, 20 29:7 58:2 59:11 64:17 68:13 76:5 parking 10:14 11:1, 21 17:19 19:20 20:6, 16 21:21, 24, 25 26:9, 13 27:19 28:17, 22, 24 29:10, 12, 25 30:6, 15, 17, 21 34:18 57:21 58:15, 21, 24 59:21, 24, 25 60:3 62:8 64:10, 20, 24 68:9 70:22 71:8, 9, 10 73:10, 17, 19, 22 74:14 76:4, 9, 16, 19, 21, 24 parks 44:10 70:8 part 15:23 16:6 19:1, 24 25:14 32:25 33:4, 17 36:8 38:20 43:24 50:5 53:23 76:8 participants 3:17 11:3 participate 41:7, 25 60:15	participated 10:2 75:22 participating 40:8 42:22 56:23 participation 79:18 particular 41:15 particularly 10:16 48:9 69:3, 24 74:25 76:10 77:21 partnering 51:23 partners 11:16 30:22 63:19 pass 6:17 passed 25:24 47:23 path 38:21 patrol 65:9 patterns 7:6 pay 22:21, 22 24:3 25:12, 21 26:5 28:19 29:6, 13 58:18 PECO 23:21 24:9, 13 37:11, 21, 25 38:17 47:6 51:13 55:4 pedestrians 59:15 77:3 penalize 26:2 pencil 18:9 penetration 41:2 PennDOT 12:16 15:22 16:3, 15 22:9 23:9 25:17 40:16 PennDOT's 15:24 Pennsylvania 12:12 28:11, 13 47:23 48:1 people 7:10 18:16 19:13, 22 22:5, 22 23:4, 25 24:2 27:21 28:2 33:7 45:2, 4 52:10 68:12 70:25 People's 54:18
---	---	--	---	--	---

12/2/2022

percent 7:15 33:13 35:17, 18 38:23 41:13 43:12 48:22 percentage 35:14, 22 perception 49:13 period 18:3 67:23 Permitting 67:10 71:11 72:7 74:22 person 20:12 36:7 54:2 79:9, 10 personal 57:2, 8 perspective 51:5 pertaining 63:20 peruse 79:7 petroleum 10:9 petroleum- based 67:24 PHILADELPH IA 1:1 7:18 8:8 9:24 16:13 28:10 33:10 37:20, 23 40:7 41:22 51:23, 25 52:22 53:22 56:3, 4, 10 57:1, 23 62:8, 17 63:4 66:22 67:1 Philadelphians 11:10 14:17 18:1 Philadelphia's 60:12 Philly 57:19 PHLCouncil.co m 3:12 phone 55:15 pieces 71:7 pilot 14:2, 5 15:16 45:9, 18 pilots 77:19 pipes 74:17 place 28:14, 15, 18 30:9 59:23 placed 63:11	places 26:13 29:4 35:21 57:23 Plan 13:11, 14 15:9, 17, 23, 24 16:2, 4, 25 19:1, 24 20:1, 20 22:4, 9 27:9 29:17 52:11 58:24 planning 9:10 11:18 19:16 35:6, 10 36:6 40:19 47:1 52:11 65:24 67:10 plant 55:11 plants 55:8 play 71:14 please 4:11, 13 34:1, 8 37:5 56:14, 19 pleased 38:14 41:25 42:14 43:3 44:4 47:6 pleasure 66:1 plentiful 76:20 pods 31:18 32:9 point 8:12 10:18 18:7 points 12:2 27:16 32:11 pole-mounted 75:19 poles 75:13, 14, 15 policies 37:18 Policy 9:5, 17, 21 11:14 20:5 42:1 66:2 68:8 pop 18:24 popping 18:25 populated 41:20 76:15 populous 76:11 Portland 77:8 possibilities 17:7 possibility 72:10 possible 3:3 60:14 possibly 64:9 potential 11:16 41:4 42:11 44:7	potentially 72:7, 16 75:11, 15 power 25:12 31:3 55:8, 10 58:17, 19 75:5 powered 58:9 practical 8:17 practice 44:17 practices 45:11 precious 48:18 55:11, 18, 22 prefer 68:14 78:12 preferred 68:16 prepare 52:11 prepared 67:3 preparing 51:15 PRESENT 1:1 4:20, 25 5:6, 16, 20, 21 6:3, 10, 15, 22 61:16 presented 66:20 presents 77:2 pressure 38:8 previous 7:19 primarily 37:17 68:9 primary 55:14 73:17 prior 3:10, 22 priorities 12:22 privacy 3:19 private 14:15 17:17 19:17 22:12 23:14 58:22 68:22 69:22 71:15 privileges 42:21 proactive 47:1 proactively 44:13 probably 15:20 18:14 24:12 26:21 29:21, 23 36:5 48:24 52:9, 16 59:15 65:5 72:5 problems 33:3 proceedings 81:1	process 7:17 11:22 51:14 74:22 procurement 13:15 produce 54:4 55:20 produced 42:5 product 32:7 products 54:23 profit 72:5 profitable 71:20 profound 67:22 program 7:20 12:11, 15 13:2 27:2 40:20 43:9 46:3 48:10 52:23 63:21 programming 11:2 programs 38:18 39:4 40:9 45:10, 19 47:19 51:22 52:4 55:17 progress 27:4 progression 26:18 32:6 project 71:24 projects 17:13 39:10, 22 75:7 promise 20:9 promote 9:23 35:3 proof 63:1 properly 77:17 properties 31:6 54:5 property 17:12 74:4 proposal 66:21 prospective 42:6 provide 12:7 22:9 23:10 37:6 43:16 47:13 51:16 56:19 62:3 65:18 70:10 75:5 79:6 provides 12:12 13:11 26:23 providing 42:2, 25 46:15,	24 51:4 63:1 76:3 public 2:8, 22, 23 3:5, 6, 8, 15, 17 7:3, 23 8:13 11:5 14:12, 15 17:18 20:6, 23 22:10 23:3, 13 26:25 39:9 40:4 43:13, 24 44:19 45:9, 17, 22 47:19 57:5 65:3 70:16 71:5 72:18 73:3 74:4, 5 79:20, 23 81:13 publicly 12:1 publicly- accessible 59:19 publicly- available 44:8 published 3:9 Puchalsky 8:23, 24 9:4 15:18 19:9 20:3, 14 21:4 22:8 23:20 25:3 26:19 29:18 31:11 34:6 35:4 36:10 79:10 Puchalsky's 57:6 pulling 55:17 pure 57:13 purely 57:11, 15 58:6 purpose 4:7 purposes 12:9 pursuing 10:19 29:19 30:12 purview 35:5 push 21:2 put 17:4 20:4, 8 21:24 30:9 38:7 56:10 65:7 69:12, 13 72:9, 11 putting 15:13 29:3 32:2 73:10 < Q > quality 60:6	question 15:19 16:24 31:16 61:2 64:7 questions 3:24 14:22 15:3 21:8, 12, 15 27:17 33:21, 24 34:1 47:11 50:17, 22 51:2 63:23 64:3, 6 78:10, 13, 25 79:4 quick 15:6 quite 18:6 22:1 quorum 6:14 < R > raise 74:20 ran 47:25 range 38:17 42:5 44:24 45:15 58:4 rapidly 10:7 27:6 rarely 58:19 59:4 rate 24:11 41:12 46:1 rate-based 75:9, 10 rates 38:8 reach 49:4 read 2:15 6:16 7:10 73:8 real 15:6 reality 60:19 really 15:21 17:17, 25 18:7, 15 19:15 20:15 24:13 29:5 30:20 31:21 33:6 41:7 45:20 48:8 49:10, 13 53:6 55:23 57:5, 6 58:24 60:11 68:5 71:7 75:23 reason 51:3 reasonable 3:18 24:12 25:19 reasons 30:13 rebates 40:24 rec 17:12 44:11
--	---	---	---	---	--

12/2/2022

recall 21:18 23:11 65:25 67:20 receives 63:8 recessed 80:7 recognize 2:14 78:17 recognized 4:5 recognizing 3:23 recommendatio ns 9:23 10:5, 24 13:12 recommending 10:25 record 4:1 6:21 37:6 recorded 3:16, 21 recover 47:20 recovering 55:13 recycling 49:5 redo 27:8 reduce 21:25 38:22 54:21 68:21 69:22 reduced 39:12 reducing 11:18 27:22, 23, 24 38:5 39:2 69:18 reduction 21:23 25:7 43:16 63:12 reference 70:1 referenced 75:18 refineries 60:7 regarding 2:12 31:7 73:3 76:2 region 37:20 regional 40:10, 18 65:24 register 40:25 registration 25:20 regular 57:18 regulation 65:11, 14 regulations 64:25 65:12 related 51:17 relates 6:20 release 66:10 released 9:22 13:6 relevant 32:19	reliability 49:18 reliable 33:16 50:10 rely 50:8 remarks 4:14 remember 68:20 70:3 78:19 Remote 1:1 2:22 3:2 remotely 3:1 remunerative 22:25 Renewable 67:15 Renewal 67:14 rental 28:19 report 8:5 9:22 10:6, 25 Reporter 81:13, 23 represents 38:2 reproduction 81:20 Republic 54:18 request 63:10 requests 63:8 require 42:13 47:1 72:11 75:4 76:19 required 2:15 requirement 35:17 requirements 62:21 requires 2:20 74:9 requiring 72:16 research 31:24 32:12 residence 62:20 residences 22:7 resident 60:19 residential 28:4 62:19 73:21 76:3, 14 residents 27:1 30:8 33:11 63:14 73:22 77:10 RESOLUTION 1:1 2:12 6:17 9:3 62:13 resource 47:8	resources 15:8 32:2 36:3 69:25 75:21 response 4:23 5:9, 12, 24 8:16 21:13 34:2 50:23 61:4 64:4 79:1 rest 22:21 result 63:14 74:21 resulted 63:12 revealing 53:5 revenue 25:7 72:10 Richardson 5:11, 23 ride-hail 69:4, 11 right 19:1, 8 21:5 22:16 24:18 26:3 33:19 34:3, 15, 25 36:13 55:17 56:11 65:15 67:8 71:5, 9 right-of-way 26:25 RMI 69:7 71:24 77:23 roadblocks 47:25 roadway 25:11 Robert 61:14, 20 65:17, 20 Rocky 66:4 67:13 69:7 role 24:9 42:16 52:7, 17 71:13 roles 11:18 roll 4:11 Rosati 66:19 Rotem 53:21 round 12:16 rounds 16:15, 23 rowhome 57:20 rules 23:22 43:22 run 49:3 76:24 running 59:9 run-off 29:14 rural 12:24	< S > safe 11:10 33:16 safety 12:8 salons 17:25 savings 49:17 saying 54:25 scale 49:4, 10 schools 44:11 51:10, 11 52:4 screen 4:15 21:9 Seattle 77:8 second 33:25 34:10 48:15 50:25 70:2 secondary 50:3 sector 17:18 22:10 23:3, 14 52:11 71:15 sectors 14:15 see 18:24 20:1 31:19 71:2 78:17 79:8, 21 seeing 17:7 18:21 21:14 seek 11:9 43:2 seeking 44:13 seen 42:19 59:8 select 71:20 sell 45:3 selling 22:18, 23 sells 47:4 Semi 66:10 Senate 47:24 Senior 37:9 66:3 sense 22:12, 23 23:19, 23 49:11 sent 21:20 separate 10:14 51:22 separating 55:12 September 56:24 serve 38:4 47:7, 9 49:1, 15 66:3, 14 71:23 service 23:13 52:25 SERVICES 1:1 2:5, 9	4:17 13:9, 18 14:1, 7 20:18 26:24 80:4, 11 serving 37:22 66:1 session 48:6 sessions 42:23 set 12:18 21:10 62:21 sewage 74:16 sewer 74:6 share 25:21 26:5 38:14 56:12 72:16 shared 44:17 sharing 60:18 sheet 61:25 shift 10:8 shop 14:5 shopping 59:7 70:7 short 67:23 shortfall 25:16 short-term 26:12 64:11 Show 40:7 shut 7:6 side 20:24 23:8 52:19 58:21 sidewalk 77:3, 4, 11 signage 62:15 65:6 significant 22:10 23:10 31:23 32:2, 15 43:1 signify 4:4 silica 55:14 simple 59:9 simply 47:4 72:21 single 41:17 sir 36:10 37:1, 8 site 14:5 17:11 44:23 sites 13:22 17:8, 20 situated 59:18 situation 60:20 slate 48:3 slowed 74:23 small 52:24 smaller 57:12, 24 70:19 smallest 66:8	soft 22:20 solar 58:7 solution 33:1, 5, 6 59:14 76:1 solutions 42:3, 11, 19 43:4, 19, 25 50:11 solve 33:3 59:9 somebody 52:17 somewhat 49:22 soon 50:4 sorry 6:6, 11 34:11 36:14 45:23 73:3 75:13 sort 71:6, 8 73:5 sounds 54:8 source 54:16 sources 15:22 58:17 space 11:1 27:19 30:6 32:22 44:9 69:24 spaces 11:21 27:20, 22 29:2, 10, 11 35:15, 18 62:16, 18 63:3, 6, 9, 12, 17 64:10 spare 75:23 speak 35:7 53:10 54:14 56:23 57:2 special 42:20 specialist 20:5 specialize 39:21 specific 62:19 63:5 specifically 16:23 20:23 spectrum 11:16 spoke 66:25 sponsor 40:4 SQUILLA 1:1 4:18, 19 6:8, 9 10:1 15:4 18:20 19:10 20:11, 25 27:8 34:9, 12 36:1, 12 71:19
--	--	--	--	---	--

12/2/2022

staff 14:11 20:16, 22 27:10 30:13 stages 46:12 stakeholder 8:3 40:10 stakeholders 40:18 stalled 48:5 start 23:14 37:3 49:6 50:4, 13 72:1 started 15:19 starting 18:23 state 2:19 16:1 37:5, 16 47:16 56:19 70:8 States 7:16 65:2 statewide 24:24 station 18:8, 16 19:8 22:17 39:15 58:12, 16, 22 65:4 stations 14:9 15:15 19:3, 5 25:1, 2 39:8 44:9, 25 51:18 59:1, 6 63:22 64:12 72:18 75:6 status 47:15 stay 18:18 26:14, 15 29:8 steam 74:17 STEM 40:8 52:4 stenographic 81:1 stepping 18:13 stops 72:17 74:13 storage 48:23 49:1 52:14 54:10 store 59:5 60:1 stores 17:23, 24 58:25 story 39:16 Strategic 9:5 strategy 14:12 17:3 32:25 33:18 street 57:21 58:15 59:20,	25 60:2, 23 75:24 streetlight 75:14 STREETS 1:1 2:5, 9 4:17 9:14 58:20 74:5 80:4, 10 strip 18:22 structure 27:6 35:1 structures 35:2 study 75:18 studying 52:15, 18 Subaru 57:9 subject 31:13 39:20 66:15 submit 16:1 submitted 16:3 subscribed 46:5 substantially 46:17 substitutions 54:22 suburban 44:18 45:7 success 39:16 49:23 successful 11:7 14:6 15:16 19:19 suggestions 43:4 suitable 48:24 suited 31:21 summer 16:4 Sunshine 4:6 supermarket 28:24 29:12 supervision 81:22 suppliers 44:23 supply 54:19 support 12:14 13:22 22:10 23:3 24:19, 21 25:1 27:13 37:18 38:18 39:18 40:12 41:14 47:7 60:13 supporting 25:22 44:12 supportive 24:8 45:18 supports 25:8	surcharge 24:24 25:19 sure 15:10 28:11 34:19 35:11 53:8, 14 65:9 69:9 70:16 73:12 surrounding 37:23 Sustainability 8:2 9:8, 15 13:8 14:2 20:17 sustainable 7:21 11:8 42:2 Sweeney 2:14 4:10 system 38:10 46:14 systems 39:6 < T > take 4:11, 13 24:9 27:11 32:22 43:6 48:20 takeaway 42:22 44:15 taken 81:1 takes 52:25 talk 25:19 27:8 53:6 78:11 talked 30:14 talking 26:11, 20 56:2, 9 71:6 TANEHA 81:12 targets 13:16 Task 9:17, 21 10:2, 3, 10, 19 11:14 17:3 27:9 42:1, 4 44:15 45:6 66:2 68:9 tasked 62:15 tax 21:24 22:1 25:8 29:13, 14 50:5 Teams 1:1 3:2 4:3 technical 17:6 39:19 51:11 66:4 technicians 51:9	technologies 32:13 55:3 technology 10:7 27:17, 20, 25 28:1, 8, 21 31:4 32:8, 11 37:19 51:7 54:4 56:9 tell 52:5 telling 54:3 term 25:25 terms 38:16 39:4 47:15 49:16 51:8 64:8 Tesla 66:10 testified 76:23 testify 3:14 9:2 14:20 22:14 37:14 50:16 62:11 testimony 3:6 14:19, 25 37:7 56:20 61:7 62:3 65:18 67:4 Thank 2:3, 17 4:8, 9 5:1 6:3, 12, 25 8:18, 25 9:25 14:19, 24 15:4 21:3, 4, 6 26:8 33:20 34:4, 6 36:13, 16, 17 37:7, 11 50:14, 18 53:16 55:25 56:16 60:16, 17, 18 61:6, 10, 12, 23 62:3, 5, 9, 12 63:24 65:16 78:14, 15, 20 79:17, 25 80:6, 9 theft 77:25 78:2 theory 60:21 thing 26:3 34:13 48:15 49:12 52:5 55:14 64:22 67:20 things 7:5 8:9 18:23 22:3 28:6 29:21 31:16 51:6, 12 52:13 72:24 78:22 think 8:9 15:20, 21	16:16 17:1, 9, 25 18:6, 10, 16 19:18, 23 20:15, 21 21:19 22:8 23:1, 21 24:10, 11, 18 25:24, 25 26:1, 20 29:18 30:11, 19 32:15, 18, 25 34:22 35:7, 15, 16, 24 36:2 42:21 50:6, 24 52:9 55:23 57:22 67:16, 20 68:7, 19 69:20 70:2 71:18 72:21 73:1 79:21 thinking 51:10 53:8 third 33:9 THOMAS 1:1 2:2 3:23 4:9 5:14, 15 6:1, 2, 5, 11 7:1 8:25 37:12 thorough 78:16, 19 thought 54:6 three 16:23 47:16 51:22 58:12 63:8 68:15 71:7 throw 48:20 time 4:1 7:21 8:12 14:23 15:1 18:3 26:4, 15, 16 27:24 34:24 55:7, 14 59:4 67:23 timeline 13:3 19:25 today 9:3 23:1 37:15 56:23 57:1 62:11 79:22 today's 2:4, 16 to-do 29:22 Tom 36:22 37:3, 9 tools 46:21 topic 14:21 26:6 tougher 45:6 town 8:3 track 41:2	tractor 28:2, 5, 12, 16 trade 53:21 trailer 28:12, 16 trailers 28:3, 5 training 52:2 transacted 29:6 transcript 81:1, 20 transformation 46:18 67:22 transit 12:8 25:18 33:1, 15 39:6 57:5, 7 72:19 74:7, 13 transition 13:13 46:13 52:12 transitioning 10:25 Transportation 8:1 9:7, 12, 20 11:8, 12 32:24 38:1, 6 40:13 46:14 50:10 66:15 68:1 traveling 57:12, 25 tremendous 20:19 tremendously 67:22 trenching 75:5 trip 70:4 trucks 66:9 true 54:7 try 17:20 30:20 31:14 68:18 trying 17:17 18:5 20:19 25:16 26:3 67:23 69:9 turn 63:10 64:15 turnover 65:10 two 13:19 15:20 16:14, 21 20:7 63:8 64:13 73:6, 17 type 26:22 27:2 52:1 54:22 64:21 74:21 types 10:16 typical 57:13
---	---	--	---	--	--

12/2/2022

typically 74:3	vehicle 7:11 9:17 10:15 11:1 12:10 13:15 23:5 25:10 26:17 28:20 30:10 48:25 53:1 56:25 57:3, 15 60:16 62:16 63:3, 21 66:7 67:11 68:2, 8, 17 70:4 75:20 76:7, 9 vehicles 7:14, 16, 17 8:18 19:14 22:6 29:4 38:7 49:19 51:17 57:8, 14, 24 63:15 66:8 68:3, 5, 21, 24 69:5, 13, 15, 23 76:5 Vice 53:19 Vice-chairman 53:18 Vice- Chairperson 4:17 victim 49:22 view 3:5 71:12 viewers 3:17 viewing 7:3 66:9 virtual 78:18 vision 11:17 visit 70:8 visitors 27:1 73:20 voice 61:19 Volts 49:24	Water 9:14 29:13 74:6, 16 Wawa 18:9, 12 way 8:2 15:24 21:2 23:24 24:20 36:5 59:17 ways 68:21 well 2:6 6:23 39:3 40:9 42:16 44:7 49:18 50:14 54:19 56:7 61:23 70:1 72:8 went 53:17 we're 7:7 18:6 19:11, 15, 16, 18 30:19 46:11 47:6 51:22 52:20 54:8 55:15 67:21 71:6 72:8, 10 we've 17:9 31:17 42:18 44:16 60:22 67:17 71:3 white 17:4 who've 11:16 wide 23:6 27:12 wider 9:19 willing 24:3 45:2 willingness 79:6 Wilmington 70:18 71:1 wiped 48:3 wish 4:4 73:20, 22 witness 15:3 51:1 61:3 64:3 78:25 79:15 witnesses 3:25 7:3 36:24 61:16 79:17 wondering 18:25 work 11:14 14:18 19:20 20:5, 16 30:20 37:17 48:9, 13 68:7, 13 69:8 70:15, 23 71:2, 11 72:7	worked 13:8 15:10, 25 55:5 60:4 workforce 51:15 52:2 working 14:1 20:23 29:16 39:23 42:17 44:1 47:5 52:10, 20 55:4 63:18 71:1, 24 77:23 78:22 workplaces 70:6 works 26:21 74:5 World 75:21 worth 29:19, 23 30:12 35:8, 25 written 43:22
< U > ubiquity 76:13 ultimate 10:5 ultimately 49:6 unambiguous 77:2 underground 75:4 underserved 12:24 19:13 41:16 43:8 understand 2:19 72:3 understandably 8:11 understanding 43:21 48:8 unfortunately 42:9 unique 38:2 United 7:16 update 17:2 60:24 upgrades 40:3 urban 41:21 70:12 USDOT 12:25 use 4:2 9:18, 24 10:22 21:10 23:18 28:10, 11 30:5 38:9 57:4 58:19 63:5 68:2 73:18 76:6 77:12 useful 34:25 users 77:3 uses 48:21 74:12 usually 41:18 utilities 9:13 14:16 45:14 47:18 74:6, 15 utility 23:13 38:8 45:17 47:19 75:3, 10, 14 < V > valet 74:14 Valley 65:24 valuable 48:19 78:6 various 13:21 14:8	< W > walk 57:4 68:14, 16 walking 33:2, 15 want 16:10, 11 26:1 30:16 35:6 69:25 75:3 78:3 79:16 wanted 34:13 67:5 wants 60:14 Washington 77:8 wasted 27:23	< Y > Yeah 15:18 18:20 19:9 20:3, 14 23:23 31:11 35:4 Year 14:11 20:9, 13 41:13 43:12 48:14 63:9 65:21 72:1 73:15 75:21 years 12:13 21:19 27:5, 7 29:20 39:17 47:17 55:5 60:22 63:13 York 77:18, 21 < Z > zero 38:25 zoning 11:22 30:4 35:9 67:10	