COUNCIL OF THE CITY OF PHILADELPHIA

COMMITTEES ON STREETS AND SERVICES

AND THE ENVIRONMENT

Room 400, City Hall
Philadelphia, Pennsylvania
Wednesday, November 12, 2014
2:55 p.m.

PRESENT:

COUNCILMAN MARK SQUILLA, CO-CHAIR
COUNCILWOMAN BLONDELL REYNOLDS BROWN, CO-CHAIR
COUNCILWOMAN CINDY BASS
COUNCILMAN ED NEILSON
COUNCILMAN DENNIS O'BRIEN
COUNCILMAN DAVID OH

RESOLUTION 140626 - Resolution authorizing the Joint Committees of Streets and Services and the Environment to hold hearings on the feasibility of and benefits to the City of residential food waste recycling including its impact on environmental quality, hunger prevention, economic savings and job creation.

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COUNCILMAN SQUILLA: Good afternoon. I know we have a lot of people to testify. We'd like to get started.

This is a joint hearing on Streets and Services and the Environmental Committees to hear testimony on Resolution No. 140626 in regards to the feasibility and benefits of residential food waste recycling to the City of Philadelphia.

Before we get started, I'd just like to say for the record in attendance we have Councilman O'Brien, Councilman Neilson, Councilman Oh, and Councilwoman Bass.

Before we call our first panel, I would like to recognize Councilwoman Bass.

COUNCILWOMAN BASS: Thank you, Mr. Chairman. I did have some opening remarks I wanted to make. First, let me start by thanking everyone for being here today, and it's really heartening to see

that there's so much energy around this issue and such a very important issue it is.

And I just wanted to say a couple of things. I wanted to start off and just say just thinking back as we were drafting this bill and coming up with a concept, I just remember years ago being a small child and my mother encouraging me, eat everything on your plate, don't waste food, there's a starving child somewhere in the world, there's a starving child here or there. And when we fast forward to today, I have a five-year-old daughter who really speaks the same language to me, but in a different way, and basically she instructs me not to throw food away but to compost it. And that's the way our young people are going, and it's really heartening, it's really exciting to see that they're picking up on something that's so very, very important.

This spring I read an article

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in the New York Times about food waste recycling in Austin, Texas. Fourteen thousand households participated in this program, which provides curbside pickup of food waste. In 2013, their city saved $276,000 from the sale of the waste to a company who converted it into compost. If they can do this in Austin, why can't we do it here in Philadelphia?

(Applause.)

COUNCILWOMAN BASS: Yeah. Let's applaud for that. If they can do it in Austin, why can't we do it here in Philadelphia?

Food waste recycling has the potential to create jobs, save the City money, and conserve energy. The next generation already understands that food waste doesn't belong in the trash; it belongs in the compost bin. It's our responsibility to ensure that what they learned, whether it's in the classroom or elsewhere, is utilized in and throughout our communities.

I want to thank my co-sponsor, Councilman Denny O'Brien, for his support of this resolution and hearing, and I look forward to learning from this impressive group of witnesses, from government, business, and community organizations. I know that together we can take the next step that will help Philadelphia continue to become the greenest city in the nation. And, again, thank you, everyone, for being here.

(Applause.)

COUNCILMAN SQUILLA: Thank you, Councilwoman Bass. And, again, I do apologize for having this meeting starting a little late, but each person will get their chance to testify. If they could try to summarize a little bit of the gist of what they want to say, we would really appreciate it.

I'll now ask Mr. McMonagle to read the title of the resolution. And after he reads the title of the resolution, he will introduce the first

panel of speakers. Thank you.

THE CLERK: Resolution No. 140626, resolution authorizing the Joint Committees of Streets and Services and the Environment to hold hearings on the feasibility and the benefits to the City of Philadelphia of residential food waste recycling including its impact on environmental quality, hunger prevention, economic savings and job creation.

Our first panel will be Phil Bresee, Michelle Feldman, and Laura Cassidy, please.

(Witnesses approached witness table.)

COUNCILMAN SQUILLA: When you get started, just state your name for the record, your position, and then you could each proceed with your testimony, and then after all the testimonies are done on this panel, we could have questions. Thank you.

MR. BRESEE: Phil Bresee, Director of Recycling, City of

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Philadelphia Streets Department.

Good afternoon, Mr. Chairman Squilla and members of the Joint Committee and Councilwoman Bass. My name is Phil Bresee, the City's Recycling Director in the Department of Streets, and I am here to provide testimony on Resolution No. 140626, which has called for this hearing to examine feasibility of and benefits to the City of residential food waste recycling. The resolution was introduced by Councilwoman Bass, and we thank her for the opportunity to provide input on this important issue.

First, a little bit of an update on the status of recycling before we begin with the testimony.

Recycling and landfill diversion goals are key parts of the City's Greenworks sustainability plan, and the Commonwealth of Pennsylvania requires jurisdictions with more than 5,000 residents to recycle 35 percent of

their overall solid waste each year. Philadelphia residents, businesses, and institutions have combined to recycle between 40 to 50 percent of solid waste during the past few years.

More Philadelphians are recycling at home than ever before. A record 127,700 tons of metal, plastic, glass, paper, and cardboard were collected through the City's single-stream curbside recycling program in FY 2014. The curbside recycling tonnages have risen from less than 40,000 tons per year in FY 2005 to FY 2014's levels. That's an increase of about 220 percent. When we compare our key single-stream recycling program metrics to other cities around the U.S., we rank near the top.

The Department also continues to work toward making program improvements and has been developing new initiatives to communicate to residents the importance of improving the quality

of recyclables set out for collection with our new Recycle Right Campaign being launched this month.

So while the resolution specifically refers to food waste, the Department will discuss it within the broader parameters of organic waste, which also includes yard wastes such as leaves, grass, brush, and tree trimmings. And I'll reference the two waste streams separately when needed.

Organics recycling has definitely received increased attention from environmental stakeholders, the media, and policymakers during the past year or so, and the attention has been driven by a number of key factors, including expanded organics recycling efforts in other cities such as New York and innovative private- and institutional-sector food waste recycling projects going on in our city and region.

The City offers some programs and has undertaken pilot projects over

the years to increase recovery of organics and provide insight into different approaches and options. These efforts include our residential leaf collection program, which is being expanded this year with the return of mechanical collection in areas with dense tree cover, and bagged leaf drop-off that will be offered on Saturdays at 22 locations. The leaf program will transition into an expanded version of our holiday tree collection program in January.

We've also been collaborating with our colleagues at the Department of Parks and Recreation to invest in new processing equipment at the Fairmount Park Organics Recycling Center. Between 2012 and 2013, we partnered with the InSinkErator Company on a food waste diversion project to better understand the potential viability of using food disposers as a method of managing food waste. Approximately 175 households in

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the West Oak Lane and Point Breeze neighborhoods received garbage disposals as part of this project.

During the 2014 Philly Spring Cleanup, volunteers separated about 15 tons of organic materials at a number of project sites, which were then composted. Yard waste is accepted at four drop-off convenience centers Monday through Saturday, 8:00 a.m. to 6:00 p.m. during leaf collection season, which runs through December 19th, and we also accept Christmas trees after the holiday season.

Beginning in 2012, the Department has worked with the Mayor's Office of Sustainability and the Managing Director's Office to recycle food waste from the Philadelphia Marathon and other special events upon request.

Organics recycling, particularly food waste composting, has begun to achieve considerable momentum in the City's commercial and institutional sectors. A handful of projects have been

supported through grant monies and technical support from U.S. EPA's Region 3 offices, but most of the growth in food waste diversion has developed independently. Commercial and institutional efforts include food waste recycling at the City's correctional facilities; food waste recycling by each of the three sports facilities in South Philadelphia; food waste recycling at a number of private businesses, including restaurants, markets, caterers, hotels, and office buildings. Examples include McGillin's Olde Ale House, Blackbird Pizza, Metropolitan Bakery, Mariposa food co-op, Philadelphia Catering, The Four Seasons, the Sheraton Downtown, The Westin, Le Meridien, and even the Comcast Center. So the list is pretty extensive. Civic, neighborhood, and business district-based community composting programs, including at University City District and New Kensington, and composting efforts in the higher

education and institutional sectors, including at Penn, Drexel, Temple University Hospital, and Children's Hospital of Philadelphia.

Proponents of adding and increasing organics recycling options in Philadelphia have focused primarily on the possibility of residential curbside collections. And a review of the Department's 2010 residential solid waste composition study shows that approximately 20 percent of the City's residential waste stream is comprised of recoverable organics. And these materials are almost evenly split between yard waste and food waste.

A review of other cities shows varying commitments and approaches to residential organics recycling programs. They run the gamut from year-round citywide collections, seasonal collections, subscription-based services, to little or no organics recycling services. Indeed, there isn't a

one-size-fits-all model. Just like politics, all solid waste is local, and cities and counties have to make policy and build programs based on their own logistical marketplace and economic realities. As a case in point, New York City's $100 per ton disposal fees, which are among the highest in the U.S., are certainly a key driver in their own organics pilot program.

Organics collection has the potential to improve curbside diversion rates, but with this opportunity comes significant capital, operational, and personnel costs, especially at the front end, including new collection vehicles, increased staffing, containers, processing costs, and outreach and education. An immediate commencement of citywide collection for organics would cost approximately $30 million in additional vehicles, containers and about 7 million per year in Class 100 costs. Finally, a processor would need to be

selected through an RFP process, which is a time-consuming endeavor. Given the cost and complexity of collection and processing, as well as the considerable public education and behavior change necessary, implementation of any program would need to be phased in over the course of a number of years.

Any program will also be limited by processing capacity and the availability of end markets. Recycled organic materials similar to metal, plastic, paper, and cardboard are commodities and must be purchased by end-users. Also similar to that of single-stream recycling, proximity to processing or transfer facilities and materials quality are paramount. At this moment in time, however, local processing capacity for a city the size of Philadelphia doesn't exist. Indeed, some of you may be familiar with the composting plant in Wilmington, which recently shut down operations due to odor

problems and multiple citations by state regulators.

Given the absence of a robust local organics processing infrastructure, the City can consider encouraging new capacity through a gradual increase in food waste diversion by institutional and commercial generators. One recommendation for Council for a light touch next step would be to amend the Code pertaining to commercial waste regulation to remove barriers to private organics collection. Such an approach would expressly prohibit food waste from the general waste stream, identify organics collection as recycling to allow for lower dumpster fees, and allow for the use of actively aerated composting dumpsters or BioBins for food waste collection.

A more proactive legislative approach could phase in mandatory food waste diversion. This strategy was pursued most notably in New York City to

support its nascent curbside organics collection program. In New York, food-permitted businesses with large floor areas are required to separate organic waste and contract with a private organics hauler. The legislation was supported by the largest hotel and restaurant and trade associations, and with this type of legislation, New York is building processing capacity in the private sector without making its own major capital expenditures. The processing infrastructure developed by the private sector will ultimately lower the disposal costs incurred by their residential program.

In conclusion, the Department and its Solid Waste and Recycling Advisory Committee have begun the process of updating our ten-year solid waste management plan earlier this year. We will be working with the Committee to examine and develop a long-term organics diversion strategy as part of the update

to this plan. We'll also be pursuing state grant monies to fund a feasibility study that will more closely examine the City's organics recycling challenges as well as the opportunities.

Thank you for your time. This concludes my testimony, and I'll be pleased to answer questions.

COUNCILMAN SQUILLA: First I'd like to also recognize the Chair of the Environmental Committee, Blondell Reynolds Brown's presence.

You can applaud, go ahead.

Are both of you two testifying also? Please proceed with your testimony, then we'll ask questions if you can when we're completed.

MS. FELDMAN: Good afternoon, Councilwoman Reynolds Brown, Councilman Squilla, and members of the Committee on the Environment and the Committee on Streets and Services. My name is Michelle Feldman and I am the Executive Director of Keep Philadelphia Beautiful

and the Co-Chair of the City's Solid Waste and Recycling Advisory Committee.

First, thank you to City Council for inviting me to testify this afternoon and thank you to Councilwoman Bass for your leadership in organizing today's hearing on such an important issue for the future of our city.

I am here today not just in my role as Executive Director of Keep Philadelphia Beautiful, but also as Co-Chair of the City's Solid Waste and Recycling Advisory Committee, a body appointed by the Mayor and tasked with advising and working in conjunction with the Streets Department. Currently, the SWRAC is focused on assisting the Department as it updates the City's ten-year solid waste management plan required by the Pennsylvania Department of Environmental Protection.

The Solid Waste and Recycling Advisory Committee is comprised of representatives from a wide range of

stakeholders, from waste haulers and recyclables processors to environmental advocates and City agencies such as the Water Department and the Mayor's Office of Sustainability. The Committee as a body is excited about exploring how Philadelphia might responsibly expand our recycling program to include organics. We believe that it is an important step toward making Philadelphia the greenest city in the nation. That said, we realize that this will be a multi-year effort and are eager to assist the Administration and Council in the planning and research process.

SWRAC believes the following are several key issues that the City and stakeholders need to consider for Philadelphia to pursue organics recycling:

Number one, capacity and cost. Philadelphia will not only need to ensure there is a network of facilities in place to process organic waste; we will also

need to ensure a large enough volume of organic waste to make collections cost effective. This might be achieved through a variety of initiatives. For instance, mandating food waste recycling for major producers. Additionally, considering current and forecasted markets, is it cost effective? Can the City afford it weighed against other waste and environmental programs?

Number two, education. Separating food waste from regular household trash and recycling will be new to many Philadelphians. A comprehensive education strategy to teach residents and business owners about proper food waste recycling will be needed to protect the organics waste stream from contamination and presents an opportunity to reinforce the Streets Department's ongoing messaging efforts around proper recycling.

Number three, phasing. The City may want to consider phasing in

organics recycling by first collecting yard waste and then expanding to food waste. This will allow time for a large-scale public education campaign, development of a market for collection of organics waste, and additional planning.

Number four, environmental impact. Given the structure of a potential program, what would the full cycle environmental impacts be? There are clear benefits, but also complex components such as transportation that would need to be understood and assessed.

Again, thank you very much for your time this afternoon. The Solid Waste and Recycling Advisory Committee is excited to be a part of this conversation and to support City Council and the Administration moving forward.

I'd be happy to answer any questions.

MS. CASSIDY: Good afternoon. My name is Laura Cassidy and I'm with the Philadelphia Prison System. I'm the

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Green Program Coordinator.

I guess I will keep my testimony pretty brief here, but I just want to explain to you what I'm doing up there, and it's pretty relevant.

I was charged several years back to bring a recycling program to the prisons. Prisons was recycling zero. Now we're doing about 330 tons a year. And then I looked at how we could actually lessen our solid waste costs. I calculated we spend about a quarter of a million dollars a year on solid waste disposal costs. If we do single-stream recycling properly, usually what is left is food waste. So I started a compost program, and I have to tell you that it is strictly grant-funded right now. We are doing it -- it initially started out as a pilot program at our women's facility. We were doing about 700 pounds a day of food waste. We've expanded to our House of Corrections, which now our total per week is probably about 14,000

pounds of food waste per week on just the two facilities. We've been given additional grant money to expand our program to all of our facilities. So I estimated, based on our solid waste disposal costs, we can probably save as much as 70 percent on our landfill fees, the City as a whole.

So eventually we're going to -- actually, this is morphing into something more than just reducing our landfill fees. We are actually creating programs for our inmates to work in. We're connecting it with two other programs that we have up at the prisons, the Philadelphia Horticultural Society at our prisons and also we are building an orchard up at the prisons. So we're going to make it a comprehensive program that we're going to -- we're looking into connecting a certificate program with Temple University. Our finished product we are donating to community gardens, church groups, and using on the prisons

grounds.

That's pretty much the program in a nutshell.

(Applause.)

COUNCILMAN SQUILLA: Thank you. I just want to say just a few things, because I know we have a lot of people here to testify, but obviously any time we do something this big, it would need to be phased in in time. And even our recycling when we started, we started gradually and then to a more robust issue and now citywide. That's been a very positive aspect of the City.

So I see a great opportunity here either to do it -- whether it's City doing it on its own or partnering with a private-public partnership or even having somebody do this entirely on their own. And I think that's something that needs to be discussed and followed through to what's the best practice.

But I do see a great opportunity here to grow our recycling

capacity, and I think this is a great opportunity for us to move forward to make Philadelphia the greenest city in the country.

So with that, Councilman Oh.

COUNCILMAN OH: I'll yield to the sponsor.

COUNCILMAN SQUILLA: Councilwoman Bass.

COUNCILWOMAN BASS: Thank you.

I just had a couple of questions. So, Mr. Bresee, I had a couple of questions. One on your legislative strategy. You had a recommendation for Council in terms of some of the things that we -- some of the other things that we could do that will be helpful. Can you go into a little more detail about that.

MR. BRESEE: For example, helping to amend the Code. So right now there is language that requires grindable garbage generated by commercial establishments, that it needs to be

disposed of in a food grinder. So rather than requiring that, maybe we could add options that would allow for food waste composting.

COUNCILWOMAN BASS: Okay.

MR. BRESEE: I think that we should also look at revising or ensuring that dumpster licensing fees, that the recycling fee be also attached to the composting dumpster. So right now if one gets a dumpster for organic material, they have to pay the same medallion fee, I believe, as one does for garbage, versus a single-stream recycling or cardboard recycling container is half what a garbage container is. So we need to make the two of them consistent.

COUNCILWOMAN BASS: Okay.

MR. BRESEE: So those are certainly a couple of examples.

COUNCILWOMAN BASS: And one other question. So you mentioned if we were to begin this organics collection immediately, it would be about a $30

million cost, plus about $7 million, I guess, in personnel costs. And how much waste are you taking into account for those figures? Is that an estimation for the entire City like when we're fully in and running in this sort of program, that about $30 million or $37 million is what it would take to maintain it?

MR. BRESEE: If we had to do it tomorrow.

COUNCILWOMAN BASS: If we had to do it tomorrow and everyone was doing it.

MR. BRESEE: Right.

COUNCILWOMAN BASS: So that would include all of the City's organic waste?

MR. BRESEE: Yes. So about 100,000 tons of residential organics are what we believe are generated.

COUNCILWOMAN BASS: Thank you.

MR. BRESEE: Sure.

COUNCILMAN SQUILLA: Councilman Oh.

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COUNCILMAN OH: Thank you very much, Mr. Chairman.

So my first question has to do with the Southwest Treatment Plant, and I have been there where they basically take sewage and put it through two very large machines and out comes the biofuel pellets that they sell. And the great thing is there's very little, if any, smell from that.

Is it feasible to somehow incorporate that type of public-private partnership into this process at the Southwest Treatment Facility?

MR. BRESEE: Well, certainly the Water Department is very much, I guess, in play as a potential partner, and indeed they have digesters and do have a certain capacity to be able to handle food waste. So it certainly is possible that one of the solutions includes working with the Water Department.

COUNCILMAN OH: I ask that

because it was my impression that they were not near the type of capacity that they could reach, and so the viability of initiating a program where there's already a public facility that is engaged with the private entity, which actually means that there's less cost to taxpayers, seems pretty feasible from what you've said. I don't know, but do you have any information on that?

MR. BRESEE: I don't really want to speak on behalf of the Water Department, except that I think you are -- Councilman is correct that the water -- the wastewater treatment system does have excess capacity, in large part because it was built for a city of two million people and a city that was made for heavy industry. So I think that, again, the infrastructure definitely can allow for some options that could be worth exploring.

COUNCILMAN OH: Okay. My other question is, as you were testifying about

the different entities that are involved, I was just wondering about the Airport. The Airport gets a lot of people through it and has a lot of what I would imagine would be food waste, and currently we're in the process of designing and building a new airport facility.

Has there been any conversations about working this type of effort into the Airport?

MR. BRESEE: We've had general conversations with the Airport on their overall waste management program. I don't believe, at least at this point, we've had anything specific to food waste. I will point out, though, that key Airport staff are engaged in the overall solid waste community, if you will, in that they attend Solid Waste and Recycling Advisory Committees and interact quite frequently. So that certainly is a possibility as well.

I'm not sure. Do you know how they handle food waste or not?

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MS. CASSIDY: Well, they have the private contractors in the food court and --

COUNCILMAN SQUILLA: Speak into the mic.

MS. CASSIDY: I'm sorry. They have the private contractors in the food court, which I think they tried to introduce some sort of composting or a pilot a number of years back, and I don't think it was as successful as they wanted it to be, because they had to deal with the private contractors and getting it conformed into their actual rental agreements at the Airport. So that became an obstacle.

COUNCILMAN OH: I know we're coming up with some new contracts now.

And then, finally, in terms of the large -- I say that because the City owns the Airport and, similarly, we have a working relationship with the School District and with other large entities that produce a lot of food. And the

total estimate of just City-owned facilities and fire stations, police stations where food is being served daily, that type of thing, when you add them all up together, has there been some kind of estimate of what that tonnage is or anything like that?

MR. BRESEE: Not at this moment.

COUNCILMAN OH: Okay. Well, thank you very much. Thank you.

MR. BRESEE: Sure.

COUNCILWOMAN BROWN: I have a point of information. Good afternoon. I do know prior to me serving in this role as Chair of the Committee on the Environment and Sustainability, I actually had a long -- a sit-down, multiple-hour meeting with the leadership at the Airport around the issue of recycling, and they actually have an annual program where they celebrate employees and departments that are doing well around recycling. So it might be in

order for us to have the Airport come and speak for themselves about what they're doing in this way and to see what's online and what their plans are.

So I would submit to the Chair -- the sponsor of the resolution that that might be an appropriate next step given the volume of opportunity that exists out there across the spectrum with regards to environment sustainability, A, to get an update and, B, to hear what their strategy and plans are for the future.

MR. BRESEE: Thank you.

COUNCILWOMAN BROWN: Thank you.

COUNCILMAN SQUILLA: Any other questions?

(No response.)

COUNCILMAN SQUILLA: Seeing none, thank you for your testimony.

Mr. McMonagle.

(Applause.)

COUNCILMAN SQUILLA: Please read the next panel.

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THE CLERK: The next panel will be Maurice Sampson, Brenda Platt, and Ned Foley, Esquire.

(Witnesses approached witness table.)

COUNCILMAN SQUILLA: I see we even have some samples here if anybody wants to come up and smell.

We could start with your testimony. State your name and then proceed with your testimony, and then maybe after all three testify, we could ask questions like we did the first panel. Thank you.

MR. SAMPSON: Good afternoon. My name is Maurice Sampson. I'm the President of Niche Waste Reduction and Recycling Systems and an appointee to the Solid Waste Recycling Advisory Committee.

I want to begin by thanking Councilmembers Bass and O'Brien for their foresight in introducing the resolution that brought us here today and also to Councilmembers Squilla and Reynolds Brown

and members of the other respective committees for taking the time to explore the feasibility and benefits of food waste recycling.

By way of introduction, I served from 1985 to 1987 as Philadelphia's first recycling coordinator under Mayor Wilson Goode and Chair for the RecycleNOW Campaign from 2005 to 2007. Over the years I provided professional consultation on waste and recycling issues for my clients, for the media, for the City of Philadelphia. Some of you were there. We've worked together on a number of issues.

I've been asked today to speak to provide some context between the Administration's comments and some of the speakers you're going to hear coming up today. This panel of experts will talk about best practices and challenges.

I think as we begin, I'm going to take just two minutes and direct your attention to the screen to just talk a

little bit about -- we're talking about composting, but I think it's important that we know how composting works just to get that context, because it's a little different than material recycling. Material recycling is mechanical. Composting is biological. It's natural. It's really the essence of -- when we talk about closing the loop, composting really marries that.

Basically, you know, in this slide you see composting happens when you mix the grass and the leaves and the straw and the woody carbon-based materials together, which we refer to as the browns, with the food scraps and manures and the things that we like to think of as the greens or I like to sort of think of them as those things that have life and energy in them, which is that food waste, with those things that are more dry. And when you put those things together with a little bit of soil -- and every teaspoon of soil

actually contains sort of the microbes and things in it, the decomposers, the things that bring it sort of dust to dust. It's in every teaspoon of soil that's out there. When you add that together with water and sunlight and the right mix, nature takes over. The natural process will make that heat up by itself and it will start to break down. And if you leave it to nature, in 100 years you'll make an inch. If you manipulate it, that bag that you have on the table in front of you, you can create that in about, what, six to eight weeks?

MR. FOLEY: Six to eight weeks.

MR. SAMPSON: And that's the magic of what compost is about.

Now, there are different kinds of -- open that bag and check that out, because this is really magic, and really it's nature. There is no chemicals involved. There is no -- there isn't anything extraordinary about this. This has been going on forever, but it's about

us stepping in and getting involved with this, this process. And if you leave this to its own devices, there are different kinds of microbes that are involved. If you add oxygen to the process, it encourages those kind of microbes to grow in that soil that don't create odor. If you take the air away, you get that smell of rotten eggs, that carton in the back of your refrigerator that you kind of want to like open real carefully because you know what's going to happen, those biology projects that your classmates did in college. You know the ones I'm talking about. That's that other microbe that goes on, that trash can in the back that got left alone in the sunlight with the container on it. That's what smells.

Now, if you take and you control that process, that's what we call -- one of those processes we call aerobic. That is with air. That's the one that where you get the composting

where there is no smell, or the anaerobic, the uncontrolled, that's when you get the uncontrolled, and that's where you get the smells in the back alleys and in your refrigerator and so forth. Or if you do it under controlled conditions and you capture it, you get the methane. That's what happens in the landfills. That's also the same gases that when they talk about the danger to the ozone, it's 20 times more damaging to the ozone, and that happens in a landfill. That's also the stuff they try and capture, because it's the same basic material that's in natural gas. And, quite frankly, all natural gas is is the material that was organic material a million years ago that we're now digging up and we're using. So none of this is magical. It's all nature. It's just a question of where it came from.

I can go a whole lot more into that, but I'm going to stop, because people in the back who know me are

saying, Stop, Maurice; just go on.

If I push the button again, as I said, there are two types, aerobic, with air -- go on the next one -- and aerobic composting without air.

So that's probably really all that we need to know about that. The speakers that follow me will talk about versions of this, but that's the basics in terms of how this works.

So really there are two kinds of products when we talk about what can we get from composting that is a benefit. We can get soils or we can get gas. So let's not make it real complicated. Those are the two basic things that we can get from this, and there are different kinds of composting.

Councilman Oh, you talked about the Water Department and what you witnessed. That was one particular kind of composting, and that was a way of addressing the sewage sludge, and what you were looking at is a solution, a

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positive beneficial way of handling what comes out, and over the years, that's been a real problem, but that is a way of handling that.

The people who speak after me will talk about ways of handling what Phil talked about, half of what we put out as organics is the woody waste, half of what we put out is that greens, food waste. You mix the two together, you get what you have on the table in front of you. And others will talk about the value that's created there. If you do it all the right way, there are jobs, there's economic development, there are opportunities that come from handling this material the right way, and there are ways of manipulating it depending on how we organize it that create benefits. Right now it's a liability because we treat it all as trash, and that's really what we're talking about here, is how do we do that. How do we treat this in such a way that it becomes a benefit from us

instead of a liability.

Now, it's been a long time in coming, but we have real reason to be proud of where our recycling has come, and Phil touched on that. It's really been in particular in these last six years. We've gone from less than 4 percent in 2007 to a high of almost 20 percent in 2011. Our curbside recycling program collecting rigid plastics, bottles, cans, and paper has really gone almost as far as it can. When I say 20 percent, if you look at those materials in our waste stream, according to the composition study, there's only 24 percent of that which makes up all of our trash. So we've collected 20 percent of it. We have real reason to be proud. Kudos to the Nutter Administration, to the Streets Department, and the largest goes to your constituents. All of those little bins that you see sitting out on the curb, there are like six of ten households put those out, and that's why

this works. It's also why you can see if you can add organics to that, instantly you can almost double it. Why? Well, 23 percent is organics. Twenty-four is recycling; 23 is organics. So it's almost as big as the recycling program that's out there right now. The key is how do we do that, how do we do that in a way that's going to be economically feasible.

Right now we basically went from collecting trash with three people, collecting trash and recycling with six people. So are we going to have nine people now collecting this material? I don't think so.

The most expensive part of any of these programs is the collection part, and it really is about how do we manage and put together an efficient collection system to pick up all of these materials. And this is the challenge that went on for San Francisco, for Los Angeles, for Toronto, for all of these places. And

Phil said it when he said that, you know, all politics is local. So is recycling and composting. We have to figure out how do we do that for Philadelphia. We have to figure out what that model is for us. They have figured it out in those other cities based on what works for them. We have to figure that out for us, and that is going to take some time and that is going to take some work and that is going to take some debate. It can be done. It has been done, and there's all sorts of information that tells it, but it is about collection efficiency and it is about how we manage that. And there is going to be along the way that challenge of we have to talk to the people that work on those trucks in terms of the unions and we're going to have to have that discussion.

When I was recycling coordinator and we wanted to figure out how to do recycling, the great question was, will the unions even mount the

trucks? Recycling didn't happen until one of our meetings, the union officials sat in the back of the room and they basically said, We'll do it as long as there are three people on recycling trucks. The recycling pilot happened six months later.

If we put nine people out, we aren't going to be able to make it happen. So I can tell you right now this is a long conversation we're going to have. We're going to have to design it with the right concepts. We're going to have to work it out. But there are really good people in the City, on the Solid Waste Advisory Committee, in the Streets Department. We have all the smarts that we need. We do need the political will of this body and the next Mayor, because this is really the task that we have to look forward to, because in 2019 when we renegotiate the trash contract, things will change, and I would suggest to you that one of the strongest

things that you could do as a body is to press us to give you a plan, to tell us what it's going to look like, and to press us to come up with answers, because I think that we have the ability to do that, but only if there is that press from you to make that happen.

Now, I think that I probably said enough about all of that. There are, you know, the short-term steps that could be taken here, and I think Phil also touched on that. This is gradual, and it really is going to start in the commercial sector. It's already started, and the folks are here to talk to you about that. Sitting here with me I have Ned Foley, who runs Two Particular Acres, and Ned is one of the most popular guys in town right now, because everybody who wants to do composting is calling him. And he can talk about what that system looks like and what those needs are. And my colleague here Brenda Platt is here from Washington, DC who can talk to you

about what's going on around the country and also some of what the economic benefits are as well.

And with that, let me attempt to stop talking and pass the baton.

Thank you.

(Applause.)

MR. FOLEY: Thank you, Council. My name is Ned Foley. I'm a composter, a farmer, and an attorney, not necessarily in that order. I have run in parallel with practicing law and composting and farming for the most part of my career. I am now a full-time composter. Our farm and our first composting operation is called Two Particular Acres. My wife and I own that. We're in Montgomery County. We also have a partnership with an organization called Haines and Kibblehouse where we were building compost infrastructure throughout Eastern Pennsylvania. We have almost 150,000 tons of capacity where we're building facilities in quarries.

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I have participated with the state Department of Environmental Protection in writing two of the three permits that exist for food waste composting. The one -- and I have both of the two that I've participated in writing. One is the Two Particular Acres, the GP-17 for on-farm composting, and then GP-45, which is an industrial composting site in quarries.

I thought that I would show you a series of slides. Pictures are worth a thousand words when it comes to composting. It's kind of hard to describe. A bag of the compost in front of you has actually come from these piles you are seeing right here. And my whole purpose of being here today is to kind of show you what the infrastructure is that exists already, what some of those challenges are, and hopefully have you guys start pursuing these measures, which will then have the private sector grow composting infrastructure.

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This picture I'm extremely proud of. I show it to anyone who will look at it. If you notice in the back, there is a series of homes. There is 42 homes back there ranging in value from a half million dollars to $600,000. We are composting food waste in their backyards. So if you think about Wilmington, think about that for a moment. They got shut down for odors. Food waste composting can be done and it can be done well and it can be done without odors and it can be done in the backyards of fancy homes. On the other side of this farm, there's $750,000 homes. At the front end of the farm, there's a brand new high school built by the Archdiocese of Philadelphia.

We do not have issues. We make 10,000 yards of compost on this farm. This farm is less than 35 miles from where we sit here today. And you will see as we go through today, we are participating with the City of Philadelphia in conducting a number of

different projects in the City, composting for commercial generators.

Food waste composting is somewhat of a misnomer. You see here a compactor and a compactor full of food waste. There's roughly 15 to 20 tons in that compactor that's just coming from a grocery store. Food waste is only but one ingredient in compost. If you put strictly food waste into a pilot, you're going to get odors, guarantee it. I will bet my farm. You will get odors. If, however, you're thinking of food waste as one ingredient in an overall process and that process including your leaves, your yard waste, cardboard, pallets, maybe even some C&D and making food waste 10, 15, 20 percent of that process, you will not get odors. You will be able to compost like we just showed you there.

That site that you see this material is going to, that site exists on the large scale of community composting. All those neighbors participate in that.

It exists on the small side of industrial composting.

Trying to fill that niche, we then began a second composting company called American Biosoils and Compost. We have 150,000 tons of capacity existing and permitted in Eastern Pennsylvania. That is the same capacity as existed at Wilmington. We are getting a lot of calls from those customers. We are not taking most of them at the current time. Wilmington has done a great disservice to the industry. One of the challenges is contamination for composters.

We believe we run a manufacturing business. We've talked about waste. This is not a waste to me. This is a raw material in my manufacturing process. I make products with this, and you will see at the very end some of the products we're actually making for the City of Philadelphia.

Some of those sites that we have, we've talked about Royersford,

which is where Two Particular Acres is located. We also have Douglasville, which is about 40 miles from where we sit here today. We also have a site in Allentown and a site in Easton. We have roughly half of the capacities within one hour drive of the City of Philadelphia.

One of the things -- one of the approaches we have taken is to be what I call vertically integrated. We do collection. You see we have toter trucks. We have roll-off trucks. We do processing. That's the composting. We do screening. We do blending. We do engineered soils and soil design. Remember that. That will come up at the end here.

We do trucking and distribution. We do bulk sales and we do packaged. As you can see, this is a product. This is something we're manufacturing. This is something that is very, very, very valuable, and you're paying a lot of money to get rid of it.

And if we divert it to composting or to some other form of recycling, because composting may not be the total answer, if we divert it, your tip fees will be lower and we'll be creating a beneficial product.

Some of the customers that we service in Philadelphia --

COUNCILWOMAN BROWN: Sir, you said what will be lower? I missed the word.

MR. FOLEY: The tip fees. I'm sorry. Tip fees are what you pay to dispose of your waste. Composters still charge for that, but we charge substantially less than what you would be charged at a transfer station or at a landfill.

Some of the customers we're serving in and around Philadelphia, Wawa Markets everyone is very familiar with, Weis Supermarkets. Weis I'm very proud of. They have invested in us by committing to us to create this

infrastructure that we're building throughout the state. We are collecting from them over 100 grocery stores as we speak.

What is amazing is what a grocery store produces in a given day. We have grocery stores that produce as little as a ton and a half per week, some up to five tons per week. Add up all those grocery stores and you kind of get a sense of the numbers of what's being wasted. Wegmans is another one. Overbrook Golf Course is another one.

One of the projects that I'm particularly proud of was conducted only a few short blocks from here. Four Seasons Hotel, we have been composting their food waste for about seven years now. And it actually just recently ended because of some hauling issues, but for seven years, we were taking their food waste. We then composted it. We then built an engineered rooftop garden mix for them. We built a green roof for the

hotel. That hotel then planted vegetables and herbs for the Swan Cafe Restaurant where we started out taking that food waste. And you can see in the picture on your left, that is the chef taking those clippings. They will end up on the plate, and whatever is scraped off the plate then came back to us again to be composted. Not one ounce of it was hitting the trash. It was being manufactured into a product to grow more food.

One of my comments at the time was literally the Four Seasons has created valuable farmland in Center City Philadelphia by diverting their waste.

(Applause.)

MR. FOLEY: Councilwoman Bass, I think you'll like this one. Hawthorne Park, we built a soil for this particular project, about 2,200 yards, three different soils, planting boxes, grass. The compost was the foundation for this soil. The compost included food waste

that had come from a restaurant or microbrewery called Earth Bread and Brewery located in Mount Airy. So, again, we are cycling this material back into the City, and we're doing this already.

I'm going to wrap this up to present to you an idea. Councilman Oh, you were talking about the City of Philadelphia and you were talking about Southwest Treatment Plant. You have a compost plant down there. You have a compost plant that is an aerated static pile. I actually met with the Water Department a little less than a year ago with an interest in renting that ground down there where I could make compost and then engineered soils for your Green City, Clean Waters initiative. And think about what it is you're doing with your Green City, Clean Waters initiative. You are trying to infiltrate your stormwater into the ground rather than have it be mechanically treated, expensive pipes and

all the rest of the stuff.

The foundation for the Green City, Clean Waters initiative is engineered soils to support plant life and support infiltration. The foundation of that is compost. If we took City leaves which are clogging up the drains for the Water Department -- I applaud you guys for now collecting them again -- mix them with your food scraps, produce a compost, then blend it into an engineered soil, which you can then put into your Green City, Clean Waters initiative, you have created the complete green circle. And the reason I met with the Water Department to talk about that specific compost site is, as Maurice has pointed out, collection is the biggest hurdle, the biggest challenge, the biggest cost. And collection is a function of how far the material has to travel. We're going to be building these soils. We're already getting inquiries. But if you're trucking your waste all the way out to

the suburbs, we're processing them, building a soil, and then trucking them back into the City, you're paying them to take a ride.

We have estimated that based on the trucking cost I had for Hawthorne Park, about 120 truckloads, that we could save the City roughly 30 to 40 percent of the cost of these soils for your green stormwater initiatives by simply composting down in Southwest Philadelphia, whether it's us or anyone else. But community composting is about doing it in your community, and you got to do it in your community because you can't be taking this stuff for a ride everywhere.

So I encourage you to think about the broader picture of what this is all about. It's not simply about, hey, we feel good about diverting this. This is about manufacturing a product that will actually benefit the City. We're taking -- we can take your leaves which

were clogging your storm drains, turn them into a product that can help you prevent stormwater pollution.

Thank you, and I'll be happy to answer any of your questions.

(Applause.)

MS. PLATT: Hi. My name is Brenda Platt. I'm the Co-Director of the Institute for Local Self Reliance. As Maurice mentioned, we're headquartered in Washington, DC. I also head up our Composting for Community project and have 28 years of experience in the business, and I'm licensed to operate big commercial compost facilities in Maryland and trained, and I was the consultant for the Atlanta Airport. So we can talk about airports. That's a very valid point, I'll say.

What I'm going to do in the few minutes I have is summarize the benefits of composting that you may not have heard about, particularly jobs and economic development. I'm going to go through

some of the best practices around the country. I've been documenting cities and programs from coast to coast for many years. And then I'm going to conclude with what can you do from where you sit, which might be useful, and I'm happy to answer any questions.

I hope you can see the projector from here. But as been said, I think it's a real actual Rumpelstiltskin story, except that you don't have to promise making what I call black gold, but you don't have to promise your first born to an evil emp.

But taking organic waste materials and producing a compost -- and it really is organic matter. And the reason -- and it's a manufactured product, as Ned said, and it's going to be added to soil. So quality and reducing contamination and the education and outreach that you're going to need to think about is going to be really important, because nothing will doom

composting in the City at all levels as a really poor quality product that's contaminated. And that is what doomed the Wilmington facility. It was too big, 500 tons per day, serving from New York City all the way down to my area in Washington, DC, and the compost was contaminated not only with plastic but with glass. They couldn't move it, and it had odor problems. It was very poorly operated. So this is an opportunity here to do something else.

Compost-amended soil, I like to say, equals stormwater management, and as Ned said, it's because what you're doing is you're changing the structure of the soil. You're increasing its porosity. It now can hold more water. So there is something almost like two dozen compost-based products that have been identified as best management practices for reducing soil erosion and managing stormwater. It's hard to see because some of these pictures are too small, but

on the top right, you'll see a typical silt fence and you'll see this on a construction project, and you'll see the sedimentation running off. That's going right into your rivers and watershed. The orange sock is filled with compost. And I don't know if you can tell, but that stormwater on that construction site is all held right on that site.

Compost blankets. The bottom middle is a bioswale. There's rain gardens. There's rooftop gardens, as Ned mentioned. There's vegetative walls. All of these things require compost, and some of the compost blankets that are being blown on steep embankments on highways actually have the seed in them to grow the plants, and it's actually the vegetation that holds the soil in place and reduces the stormwater from running off. So this is really important.

I've done a lot of work documenting the jobs. So what this shows is kind of a summary, if you will. If

you have one million tons of organic materials and you send that to be burned in an incinerator, let's say, you might sustain 120 full-time equivalent jobs. If you landfill it, 220. But just making the compost at facilities like Ned's, you will sustain 740 jobs. But because it's not a linear system and you're not just sending the organics to disposal with no life afterwards, it's a product. If you're using it for green infrastructure like the green roofs or rain gardens or the steep embankments, just that kind of green infrastructure, low-impact development would sustain another 620 jobs from now using that compost that you've produced in other accompanying businesses. So total for composting, let's say, compared to landfilling would be closer to 1,400 jobs compared to the 220.

So there's a lot more detail that I can share with you, but I don't have the liberty today, but I have a full

report called Pay Dirt on this that I'd be happy to share.

There was a study done -- the industry journal is Biocycle. It's been around for many years, and they do a survey of how well cities are offering curbside residential collection programs like you might be considering here in Philadelphia, and they have really grown in terms of numbers and number of households served. The latest survey done a couple years ago, there's 183 cities and counties that are now served with source separator organics programs serving more than two and a half million households in the U.S. Typically -- and I have some pictures I'll show. What we hear about a lot is San Francisco and Seattle. Those have been some of the more well-developed programs, and what they often will give is in addition to your recycling bins shown here, they'll give a green toted wheeled bin that you can put your yard waste and your food

waste in. And I have some pictures of San Francisco's. It's hard to see those trucks, but the outreach is evident even on the trucks. And I know here in Philadelphia your trash trucks and recycling trucks are also a great outreach. I've seen some of them. But this one with the berries on the right says "Composting: A Berry Good Idea." And one with the lettuce below it says "Lettuce: Let Us Do More." I hope you get that. But they use every opportunity, street festivals, to use that for education outreach of what's included.

The outreach materials that they use, which I'll show in the next slide, this just shows the toters that are given, very convenient system designed for high participation, high diversion.

The outreach materials are done visually so that you can -- no matter what language you speak, you can tell

visually what would go in the bin. And these type of posters and outreach have been replicated in dozens of communities across the country.

San Francisco gives every household a kitchen pail to make it easy, and on the pail as well as the wheeled cart you can tell that it says what could be included and what not. So you don't have to remember. It's right there, easy to understand.

Seattle is a similar program. And a lot of these cities are actually very similar, but what I have here is that because of the infrastructure, it's so well established and designed for participation and education that now wherever you go, you see this three-bin system. You see recycling, you see trash, and you see organics. So there's a couple of pictures of food trucks, taco trucks. There's the subway. There's Starbucks. There's McDonald's. So it's not just the fancy -- what was it, the

Four Seasons? It's not just the Four Seasons. It can be throughout your city and the food waste generators everywhere you go, and, of course, the Airport would be important.

One of the things that makes Seattle's program very successful is they've banned non-recyclable and non-compostable food service packaging. So that's among the policies you have in your toolkit. Washington, DC just passed a ban this summer, expanded Styrofoam, and then requiring compostable products or recyclable or compostable. And I will tell you that the industry has really stepped up. When Seattle passed this, their bill, in 2009, there were only 70 certified food serviceware products that were certified as compostable. It's now closer to 5,000. So there are products for like almost every single application, including for the plastic gloves that cafeteria workers might use, so...

You don't have to reinvent the

wheel for outreach and education. I love this. You mentioned, Councilwoman Bass, about love food, not waste. Well, Eugene, Oregon, small city, but they have all their outreach materials at open stores. They'll share it. I love this example where they sent a letter to businesses explaining their new program for curbside collection of food waste, and the version in 2011 just looked like a letter, but the image there on the right shows their outreach that they did this year. Same exact information, but now clearly more engaging. That's the type of templates that you could use for your residential sectors, social media, commercial sector. You don't have to reinvent the wheel in terms of spending a lot of time developing these materials. So many cities have them.

One of the things that I think is disturbing is the trend to rely on large-scale, far-away compost sites. The first two pictures up there are actually

photographs of the Wilmington, Delaware facility that we've heard about already. And at 500 tons per day, it's too big. Right now in DC where we had a lot of these programs, smaller jurisdictions that have been doing residential food waste recovery, they have no place to take it, because that was the only game in the whole Mid-Atlantic region.

One of the beauties of composting is that it can be small scale, large scale, and everything in between, and there is no one way to do it. And, in fact, I submit to you that you should be looking at -- one of your highest priorities should be to develop a diversified, decentralized, distributed, if you will, locally-based composting infrastructure that doesn't rely on just one large-scale site.

This shows farmers doing it, small towns, retreat centers, schools, and in your backyard. We don't often hear about backyard composting, but even

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if 20 percent of your households will backyard compost, you are now not picking up that material, you are not now paying that disposal fee at the landfill to tip it. So you can -- there's communities in Maryland that have shown that the 20 percent of the households that will backyard compost through half-price bins, that they think over the cost of the lifetime of those bins -- and this is a town of just a few thousand -- can save a quarter million dollars. So it's not insignificant over 20 years if you can get people doing that now.

Lots of collection entrepreneurs. So collection, you'll be hearing from City Sprouts and some others I think in Philadelphia. So there's a lot going on. But these are what I like, the human power pedal operators and spanning from California, North Carolina, in the winter Massachusetts and in Austin, Texas is doing it. No one way to do the collection. And one of the

beauties of these type of programs is that people love it. They love -- it's almost advertising for the larger municipal programs, because people feel good when they're giving their food waste to somebody who is collecting it in a bicycle. So it's like a gateway to getting people engaged and interested in your wider citywide program that might be coming.

This is -- you may have heard of the food waste hierarchy. First we should reduce waste, then we should rescue food for eating, edible food, which of course should be part of the plan, but next is backyard composting and then next I would say is small-scale decentralized composting before you look at centralized composting systems and certainly before disposal operations.

You mentioned Austin, Councilwoman Bass, and I'll just say that one of the things that's unique about Austin is, it's one of the cities that

has a zero waste plan, and composting is the heart of its plan. You can't get to zero waste without targeting your biodegradable materials. By the way, in case some here might be rolling up your eyes about zero waste, yeah, right, well, it's a planning construct. Manufacturers have a goal for zero defects in their products. A community might have a goal of zero drugs in their community. So it's not that we think we're going to get to zero waste, but it's a plan. If you're not for zero waste, how much waste are you for?

But the text there that I have is that what's unique about Austin's plan and zero waste in their composting is that they have acknowledged that a decentralized composting process is important and can reduce transportation costs and that there's a link to local food production and clothing, kind of food access and food security issues in their city, which is why they're rolling

out this kind of backyard composting, composting at community gardens and urban farms.

I just have a few more that I'm going to share with you.

New York City actually may be an interesting model. Phil mentioned New York City, some of the mandatory policies that are coming, but what he didn't mention is that the City has the New York Compost Project, is supporting community-based composting. It's in their budget and they have -- this map shows there's 225 community-based compost sites throughout all five boroughs.

And I'm going to just share with you some of the things they're doing, because even though this is going to be a multi-year process here in Philadelphia, getting the capacity up and running, there are things that you can be supporting today that will help grow and engage citizenry at the school level, because, of course, as we know, young

composters become old composters, and if we're not reaching the kids, we're not really doing our job very well.

But here in New York City, among the things they're doing is at all the farmers' markets, they're collecting food scraps. Residents can walk it over there. And almost all of the material that's collected now through almost 40 farmers' markets throughout the city is going to community-based composters. And some of them are urban farms like Red Hook Community Farm. This is in Brooklyn. And this windrow, a long pile that's being composted, that's six tons of food scraps delivered on one day that 20 volunteers are working into that beautiful windrow by hand, without any equipment. But their goal, of course, is not to compost. Their goal is to produce food for a part of Brooklyn that doesn't have access to healthy and affordable food. And so they're just a great model of how you're integrating composting,

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urban agriculture, producing food with workforce development, urban youth are involved. And so these are -- and there's many examples of this throughout the country.

In addition to some of the urban farms, they're also doing community gardens. I love the Battery Park Community Farm, because it's right down -- if you've ever gone to the Statue of Liberty or Staten Island, you've taken the ferry. This is right there. And you can see the highlights on the bottom right, but it's a farm, and those bins that you see with the yellow containers, those are from those farmers' markets. And they're being delivered, and they have volunteers that are ready to work it in. So it's a really wonderful distributed system.

One thing I cannot emphasize enough is the need for trained operators, because large-scale facilities need to have trained operators, but small-scale

sites do too. It's not rocket science, but it is science and you need to know how to balance these materials, the oxygen, the temperature, how to make those microorganisms happy.

And that is one thing that actually -- we'll skip this one. It's another farm that's really great in Brooklyn.

One thing that New York City does very well is, they have a master composter training program, and over the decade or so that that program has been operating, they have trained more than 1,000 people. That's 1,000 advocates within New York City. An army of a thousand that have now been advocating for the program that Phil mentioned is getting ready to roll out in the municipal sector with the large food waste generators as well as the residential sector and multi-family. It's those thousand people that have advocated for the municipal program that

make it the success that it is.

And then I think the last slide -- and I'll just end here -- is what can the City -- what can you do, what can the City of Philadelphia do. I think establishing a policy to develop a diversified infrastructure is really key. Developing a plan that includes developing the capacity and looking at where that can go.

One of the things that we've heard time and time again is access to land, needing funding support, technical assistance, models for these community-based programs, the training program. And not to be overlooked is buying back the finished compost. We used to say in recycling you're not recycling unless you're buying back recycled content products, and the same is true for compost.

So there's a number of examples of procuring -- minimum organic matter standards in soil, buying compost back,

specking it in these rain gardens, and there's a number of things that you can be doing along those lines to help drive the market, because if nobody is buying it, we won't be as successful.

So I'll just end there. Thank you for the opportunity.

(Applause.)

COUNCILWOMAN BROWN: Good afternoon.

MR. FOLEY: Good afternoon.

COUNCILWOMAN BROWN: Let me thank you for that class in sustainability food wasting 101. Quite informative and very exciting, very, very exciting.

I have questions all over the place, so I'll try to make sense as I walk through my notes here.

So to the lawyer/composter/farmer, how many do you currently employ?

MR. FOLEY: I have six full-time employees who are doing the work of probably 15 to 16 people, no

kidding. One thing you'll find about composters, they're a pretty dedicated, passionate group.

We also -- because we're doing this in partnership in these quarries, we are utilizing the employees that exist in the quarries already. So there are literally hundreds of employees who are doing in on a part-time basis for us as well.

COUNCILWOMAN BROWN: So that then is to suggest that there is enormous job opportunity.

MR. FOLEY: There absolutely is, and every single job that is created with composting, from myself and any composter I know, they are good living-wage, middle-class jobs.

COUNCILWOMAN BROWN: That's important, very important.

So if either one -- please forgive me for not having the witness list up here and not being able to call you by name, but I appreciate the last

slide, because always the question for me is, And what role can the City play? Because I get it. I read from the same -- I drink from the same cup of water when it comes to this issue of sustainability and environment. And you've given us a snapshot of a potential role for the City. Do we have this PowerPoint in writing?

MS. PLATT: I think it's on that computer, so you have it.

COUNCILWOMAN BROWN: Because it will certainly be helpful to have this material, particularly given the exciting activities that are happening in other municipalities, which for me are evidence enough that it's possible. And I'm particularly excited about what's happening in New York City.

You've spoken to job opportunities. Trained operators, talk about that.

MS. PLATT: Yeah. So as I mentioned, there are compost facilities

at any size. So the large-scale commercially run sites should have trained operators, and those are trained at a different level. Like in my state, Maryland, the state licenses and they have extensive training.

COUNCILWOMAN BROWN: Really?

MS. PLATT: New York City's master composting training program, those individuals sign up to be trained. It could be like a six- or eight-week course, maybe 30 hours of -- 15 hours of classroom instruction and another 15 hours of field run, getting your hands dirty, and then they commit to doing 30 hours of community service. And in New York City, that could be building bins in churches, community gardens, schools.

COUNCILWOMAN BROWN: Returning citizens, veterans?

MS. PLATT: Exactly. And so actually we're replicating that in the DC area right now. We're calling it our Neighborhood Soil Rebuilders Program. So

partnered with the DC Department of Parks and Rec, and we're recruiting people from neighborhoods where the community gardens are. So they're rooted in those neighborhoods, get trained, can go back and start composting and building bins at those community gardens.

COUNCILWOMAN BROWN: How old is the effort in Maryland? So a broader question would be, when you think from the time it was an idea, reduced to paper, putting infrastructure in place to make it happen, actual execution of the idea, what kind of timeframe are we talking about?

MS. PLATT: We just launched our program in Maryland. So it's brand new. We started it this month, in November, and it did not take us that long to launch it. We did a survey of master composter programs around the country. We have done all the work for you, I would say. We gathered curriculum, training manuals, and we are

designing toolkits to make it easy to replicate in other cities. And we are looking for at least three cities who would be interested in replicating what we're doing in DC, and we would love it if Philadelphia was one of them.

(Applause.)

COUNCILWOMAN BROWN: So is that a model that's for purchase or is that a model that --

MS. PLATT: Great question. So there's no one way to do the training program. A lot of the training programs we found around the country work with their extension agents that are already doing master gardener programs. So that if Philadelphia has a master gardener program, that may be a path for it where, if you will, the infrastructure is kind of set up to do that training.

In New York City, the program is funded by the Department of Sanitation and they have partnered with botanical gardens that do the demonstration sites

and ecology centers. And so there's --

COUNCILWOMAN BROWN: Any number of vehicles or paths.

MS. PLATT: There's any number, and we would explore what would work here and, in fact, you could try more than one way.

COUNCILWOMAN BROWN: Well, I need to commend my colleague Councilwoman Bass on bringing the discussion and dialogue to this level, because knowing what the possibilities are certainly opens up our eyes, and if there's jobs at the end of this conversation and debate, then for me it's worth the exploration.

(Applause.)

MR. SAMPSON: Just a comment I want to make. The Institute has a staff person in the City. So they actually have staff that is based here. So you have a connection directly to Brenda who is in Philly.

COUNCILWOMAN BROWN: Okay.

MR. SAMPSON: So you're as

close as that if you wanted to get heavier into that.

I also just wanted to -- a point that I wanted to make, Councilman Oh, that airport program, I actually was involved in the pilot there. So if that's something you want to talk about later, we can.

COUNCILWOMAN BROWN: And then the final observation I would make is -- I'm having a brain freeze on the gentleman that worked in the Obama Administration that really went across the country. In fact, we hosted him in Philadelphia at one point.

MS. PLATT: Van Jones?

COUNCILWOMAN BROWN: Van Jones, yes. And how important it is as we roll out any and everything around sustainability and the environment, that we leave no one behind. And for those in our poorer communities, some might say disenfranchised communities, whatever the title is, it's imperative that we bring

them along and get them in the loop of this opportunity and the future.

(Applause.)

COUNCILWOMAN BROWN: Thank you.

(Pause.)

COUNCILWOMAN BROWN: I'm here to listen, and then I'm reminded I'm Chair of one of these two committees.

So if we could move to the next panel, and thank you very, very much.

COUNCILWOMAN BASS: No, no.

(Applause.)

COUNCILWOMAN BROWN: Stay seated. Stay seated. Sir, please stay seated. The sponsor of this resolution has questions and comments.

Forgive me, Councilwoman Bass.

COUNCILWOMAN BASS: Thank you. Thank you for the recognition, Madam Chair.

So I just wanted to say a couple things, and the first is that I am just so excited. I never thought I would be so excited about dirt, but I am so

excited about what has been presented here today and just what the possibilities are. And, Maurice, I've known you for a long time and I have to say, I'm just so impressed by your presentation and all the information that you provided. You're always a wealth of information. But I just have to say the way everything, all of you, the way it was presented today and laid out really makes us feel that this is so doable and just very possible, and we can start off with some small steps, but learning from people who -- from cities that are doing it, comparable cities. And Austin, Texas is a stretch. It's a little far away, but Washington DC is around the corner and so is New York City.

And so it just really gives me a lot of hope and inspiration. I mean, I'm ready to go throw some stuff in a trash can and put it in my yard and throw some dirt on top of it right now and get started.

And so I'm just really charged up on this issue and hopeful that we can move on this sooner rather than later. I don't think that this is optional. I think this is something that we have to do. I think we as a city have to make it a priority, and I just really want to thank you for everything that you presented today to help us be able to do that. All of this information is really going to go into a report that we'll be able to then dissect, pull apart, how do we get started, how do we figure these things out, along with the Administration, who I know is going to be excited and helpful. I see Donald Carlton in the back over there. But I know that this is going to be something that everyone is interested in seeing happening. So I look forward to working with you all as we prepare to move forward.

So thank you so much.

(Applause.)

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MR. SAMPSON: Thank you. This is only the first panel. The good stuff you have yet to see. The stuff you're going to see is what's already here. Those are your next panels.

COUNCILWOMAN BASS: Thank you.

THE CLERK: Could we please have Tim Bennett, Rocco D'Antonio, Kendall Christiansen, and John Hambrose, please.

(Witnesses approached witness table.)

COUNCILWOMAN BROWN: While those gentlemen please move to the table enthusiastically, we're going to ask our colleague Councilman David Oh to offer some remarks.

COUNCILMAN OH: I just wanted to apologize to everybody. I do have a meeting that I have to prepare for, but I wanted to state that so you didn't think I was just leaving because this wasn't important. It's very important. I do have a meeting that I have stakeholders

that I have to prepare for, but I do appreciate your testimony. And I also would like to commend Councilwoman Bass on this, really more than I thought, more than I thought, very important, and certainly I look forward to continuing this discussion with everyone. Thank you.

Thank you, Chairwoman.

COUNCILWOMAN BROWN: You're welcome, Councilman.

Good afternoon, gentlemen.

(Good afternoon.)

COUNCILWOMAN BROWN: I can't hear you.

(Good afternoon.)

COUNCILWOMAN BROWN: I know you're excited to speak. So if you would state your full name for the record, and we'll start at my extreme right and go to the left. Say your full name and proceed with your testimony.

MR. HAMBROSE: My name is John Hambrose. I work for Waste Management.

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MR. BENNETT: My name is Tim Bennett. I'm here from Bennett Compost.

MR. D'ANTONIO: Rocco D'Antonio, Organic Diversion.

MR. CHRISTIANSEN: Kendall Christiansen on behalf of InSinkErator.

COUNCILWOMAN BROWN: Very well. And so what I will also be curious to know is as we heard from other panelists, the location of your outfits, the headquarters, I should say, knowing that you probably work in the region, but that would be helpful to know as well as you fold that into your testimony.

Proceed, please.

MR. HAMBROSE: Good afternoon.

COUNCILWOMAN BROWN: Good afternoon.

MR. HAMBROSE: My name is John Hambrose. I work for Waste Management. I'm the Communications Manager for our Greater Mid-Atlantic area, which is based in Ewing, New Jersey. We serve residential, commercial, and industrial

customers throughout the region, and we're proud to provide waste disposal services to the City of Philadelphia and are thankful for the City's business and our relationship with the City.

What I'd like to speak about today is that portion of food waste which is no longer suitable for human consumption, but still offers society a value as a resource, energy waiting to be harnessed.

Waste Management is operating its CORe technology -- and that's an acronym for Centralized Organics Recycling equipment -- in Los Angeles, California and has permitted projects in Brooklyn, New York, Boston, and Northern New Jersey, which we hope to be operating in 2015. Our CORe projects require a source of clean food waste, a variety of environmental and operating permits, and a user willing to take advantage of our high BTU product.

By enacting a food waste ban,

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New York City has created the food waste stream our plant in Brooklyn will need to operate.

When New York City's food waste arrives at our CORe plant in Brooklyn, it will be processed through our project's sophisticated and patented process that will turn food waste into a bio-slurry ideal for anaerobic digestion. And, Councilwoman Bass and Councilwoman Blondell Reynolds Brown, I'm talking about an energy shake of the highest order. This is a mixed slurry, and it will be trucked in tankers to a wastewater treatment plant that employs an anaerobic digester, where our product will be converted into renewable energy in the form of methane gas.

When our bio-slurry is added to the material entering the digester, our product significantly increases the amount of methane produced by the digestion process. The methane captured by the digester can be used to produce

heat or electricity. The solids or sludges produced by the process are ideally recycled or disposed of.

Here's some of the benefits that we expect to see in Brooklyn, New York: The diversion of this waste from landfills; the elimination of 3,500 miles of long-haul diesel tractor-trailer trips to disposal sites; the generation of enough natural gas in the digestion process to heat nearly 2,600 New York City homes; reduction of annual greenhouse gas emissions by more than 45,000 metric tons, the equivalent of removing 9,500 cars from the road; and our project will help New York City reach its goal of reducing municipal greenhouse gas emissions by 30 percent by 2017.

As you've heard here today, the success of any recycling operation depends of the quality of the material it receives. If the material a recycling center receives is not sorted well, the cost of processing these materials climbs

and the value of the processed product declines. This is not a sustainable business model.

Assuring a clean stream of any recyclable requires intensive customer and community education before service startup and ongoing maintenance education. It has been our experience that good recycling practices are not maintained without ongoing education.

Waste Management admires and supports Philadelphia City Council's desire to reduce and recycle food waste and its assembly today of so many of the people and ideas that will help move this effort forward.

Thank you for the opportunity to contribute to your work.

COUNCILWOMAN BROWN: We thank you.

(Applause.)

COUNCILWOMAN BROWN: Good afternoon, sir.

MR. BENNETT: Good afternoon,

Councilwoman. Thanks for having me. My name is Tim Bennett. I am the founder and owner of Bennett Compost located right here in Philadelphia.

So we've talked a lot about what's going on in other cities, and I'm here to be a little bit of a cheerleader for what we have going on in our own backyard.

Philadelphia does have a curbside compost collection program. Nearly 1,400 households throughout the City are participating in it, households in every single district, every single Council district, although most of them are concentrated in six particular districts.

Where is all this composting going? It's being picked up weekly from their curbs and it's going to six urban farms right here in Philadelphia where it's being made into compost, some of which is going back to the people who we're collecting from, some of which is

going to the urban farms that's using it, and others are going to gardeners in Philadelphia and outside of Philadelphia for use in their own home gardens and kind of larger flower beds.

We don't just have 1,400 people who are talking about doing it. On any given week, 75 to 80 percent of those people are putting their bin on the curbside and it's being collected. This year alone we've kept 150 tons of food waste from those households out of the stream, saving the City money. We're creating jobs. We have three full-time employees and three part-time employees currently, and this has all been created without any money from the City and actually started with $100 of my own five years ago.

COUNCILWOMAN BROWN: Bravo.

(Applause.)

MR. BENNETT: So how do we pay for those jobs and to do all that work? That's really a testament to the people

in Philadelphia and how much they want composting to happen. These are people who are paying $15 a month to us for this service. So these are people who they don't save any money on their trash bill, but this is how much they believe in composting and how much they want to have this happening. That's only 375 or $3 a week depending on how many days they are, about the cup of a high-end cup of coffee.

They get compost back annually, and because these are people who are interested in doing it and opting in, our contamination is probably under one percent of the total material that we collect. So it's very clean material that's producing good compost that's being used.

The biggest challenge for us is just letting people know that we exist, getting the word out there, finding out new places to do it, and dealing with the permitting and regulations that exist or

don't exist really to help what we're doing here on a state level in Pennsylvania.

Finally I'll close with two points. One is, if the City wants to expand what we're doing and run a slightly larger pilot, we could roll that out fairly quickly.

Two -- and I'll just follow up on Councilwoman Bass' desire to really start composting right away. We can have a bin at your house tomorrow and you can have it collected on Monday if you're ready to get started.

(Applause.)

MR. BENNETT: Thank you for your time, and I'm sure you guys have some questions later. I'm happy to answer them.

MR. D'ANTONIO: Good afternoon. I'm Rocco D'Antonio. I'm the managing member of Organic Diversion. We're a commercial food waste reduction and recycling company. We say "reduction"

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because although we collect food waste on a daily basis, we think the most important thing is to put the best possible use to food waste, and that is to work with companies like Philabundance to serve the needy and those who are in need of food on a daily basis.

We do not handle any residential business right now. We're strictly a commercial company. We do business to business. We handle over 200 stops a day, seven days a week, in four states, and we're strictly focused on educating and growing the commercial sector.

You asked specifically where does the City play a role in all this. Well, generally companies like ours and other people in this room take the burden of doing everything on their own, and to make a successful program, there's several steps that have to be employed to actually make it a success, especially in a large capacity.

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On a daily basis, myself and other companies like us are engaged in education and training. That's probably one of the most important things. Although it's not incredibly difficult to say put food or soiled paper products into a green bin, it is difficult when we've been doing things in other ways for a very long time. So changing consumer behavior is a little more difficult. It requires commitment, it requires time, and sometimes requires money.

Layering into that is accountability and oversight. No training program can be successful if you can't measure the effects, and the effects are measured by the amount of material you can divert from a waste stream, whether it be from a commercial kitchen or somebody's home, and the --

COUNCILWOMAN BROWN: Pause right there, sir. You said the amount of?

MR. D'ANTONIO: Material that

can be diverted. So, in other words, how much food waste can we get out of a commercial kitchen, how much food waste can we get out of your home.

So training and oversight and accountability are important keys to getting that material out, and really the oversight and the accountability, to measure it and to make corrective measures, if we're not doing a good job, if we're leaving material in the trash, if we have contamination like plastics and bottles in with our food waste. So we're tasked with that on a daily basis, as are other commercial companies and even the residential companies.

The next thing is developing that commercial collection infrastructure. There are people out there that collect now. We're a large-scale collector, but it does require a lot more collection infrastructure. When you're talking about large-scale collection programs,

there's a variety of trucks, different sizes and configurations. There may be considerations as to ordinances on where trucks can go during specific times. All of those things have to be considered if you're looking for large-scale commercial or residential activities.

You heard a lot about receiving or processing infrastructure. That's probably been one of the most difficult things. There is very little receiving infrastructure in our areas. We collect, like I said, over 200 stops a day, seven days a week. We go to a number of facilities, both permitted farms, small compost facilities, and very large compost facilities, as far away as Virginia, on a daily basis. In fact, I have trailers running to Virginia, Southern Virginia, seven days a week.

So it's a little painful, but sometimes you have to put the cart before the horse to build that infrastructure. But we do need receiving infrastructure

to expand in this area. We do need multiple venues, because history has taught us that one large facility is very risky if it fails. I've been in this business for six years and I have so far survived three closures, all three of which have been very painful.

In addition to that processing infrastructure, there needs to be expanded markets for the end products. So we're talking about making compost. We're talking about all the beneficial uses. If you start increasing your composting activities, you're going to increase your compost coming into the market, and there needs to be education, training, and ways to sell that product into the marketplace. So in areas where the City could participate, any one of those four categories would be helpful in developing the infrastructure for large-scale commercial and/or residential composting.

There's been some success

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stories on large-scale diversion programs. You talked about New York City and others. In the commercial sector, there's legislation in multiple states in the Northeast. Right now there's Massachusetts, Rhode Island, Vermont, and Connecticut. The Connecticut bill was very interesting. It said if there is a compost facility and you meet a certain size criteria, that you have to compost. So, in other words, if somebody builds one, you'll have to. If there's not one available, then obviously you don't. And what that did is, it created a lot of opportunities for developers to come into the state and say, Legislation is in place, we know if they build it, they will come. And that was a really strong signal to the marketplace, that it made sense to make investment and grow jobs.

I can tell you the same initiative is already making its way through New Jersey for something similar. It's hard to say if it will become a

reality or when, but I can tell you that it's on the radar screen and it had a first reading in the Senate several weeks ago.

Thank you very much.

COUNCILWOMAN BROWN: That is exciting.

(Applause.)

MR. CHRISTIANSEN: Thank you to be here this afternoon and your interest in this top. My name again is Kendall Christiansen. I'm the principal of a consulting practice called Gaia Strategies. I live and work out of Brooklyn, New York. So I know a lot about what's going on there. I was a founding Assistant Director of New York City's recycling program 25 years ago and chaired its Recycling Advisory Board for many years. And for the last 17 or so years, I've had a relationship representing a company called InSinkErator. Many of you may know them as the world's leading manufacturer of

food waste disposal devices. You may have one of their products in your kitchen sink, and hope if you do, you're a happy user of it. They were founded in Racine, Wisconsin 75 years ago and never left. They sell their American-made products in 100 countries around the world, and I've been leading their public and environmental affairs work around the U.S. and Canada for the last ten years.

So we came to Philly a couple years ago as we were talking to a bunch of cities with sort of three big ideas. And let me just back up by saying you have a presentation from me about our Philadelphia project in your folder, as well as there's a four-minute video I was hoping to show you today, but I will leave you to look at that at another time.

The three big ideas are this:

Food is mostly water, 70 percent water on average. Vegetables and fruits are 90 percent plus.

The second big idea is that what we used to call wastewater treatment facilities are expert in managing liquid resources. In fact, that industry is now rebranding itself as the water resource recovery industry on the premise that wastewater is filled with resources, including clean water, renewable energy, and organic material.

And the third big idea is that in-sink food waste disposers are a time-tested, market-proven device to start the process immediately of diverting food scraps to beneficial use through that water resource recovery system. About 50 million disposers installed in the U.S. We figure about 40 percent of Philadelphia homes already have them. So in addition to the 1,400 homes that you're serving curbside, 40 percent of Philadelphians are also taking advantage of that tool to daily divert their food scraps.

So I came to the City also with

three premises in mind. One is that -- and these are all about the City's Greenworks goals. We wanted to help reduce trash, we wanted to increase the production of renewable energy, and we wanted to help the City reduce its greenhouse gas emissions. And some of the people in the City that we worked with are in the room today, and I wanted to particularly call out Commissioner Perri, Director Bresee, Deputy Commissioner Donald Carlton, and Scott McGrath and Katherine Gajewski from the Mayor's Office of Sustainability as people that we worked with over the last several years around this project.

So Phil made a brief mention of this project in his testimony and it's described more fully in the presentation in your packet, but in brief, we chose, with the City's help, two neighborhoods, North and South, worked with 173 homeowners to install first-time disposers for them, worked with them over

the course of a year to get used to how they operate and to take advantage of them. It launched in May of 2012. We reviewed the project results with the City staff earlier this year, and the results we were looking to study were about waste composition and how it changed over the course of the year with use of a disposer and how their behavior changed as well.

I will leave the results to you to see in the folder, but if you were to watch the video, you would see effectively strong endorsements from the City agencies and leaders that we worked with, as well as the lives of real people having been made better by having the convenience of a disposer in their kitchen to immediately divert food scraps from their trash. So we found effectively 100 percent participation and we got in the order of 30 to 40 percent of their total food waste diverted through the use of the disposer.

I also want to point out that Philly is the real leader in taking on this project. We had talked to a number of cities before Philly agreed to take it on, and since then, we are now working on similar projects in the cities of Chicago, Milwaukee, Tacoma, Boston, and launching one in Calgary as we speak. So by early next year we'll have the results of a total of 500 disposers being installed in six cities through these demonstration projects to help cities, not only those six but others, take a close look at the efficacy of disposers as part of the broad toolkit for achieving your sustainability goals.

I'll conclude by saying that point again. There's not one-size-fits-all. There's not just one tool. You've already heard today about a variety of tools for both the residential stream as well as the commercial and institutional and industrial waste streams. Lots of opportunity. We're at

the early innings of this ball game to figure out what the right set of tools is, and InSinkErator is very pleased to be part of working with the City already around this issue of assessing the efficacy of household disposers as a part of that toolkit for going forward.

Thank you very much.

COUNCILWOMAN BROWN:

Councilwoman Bass.

COUNCILWOMAN BASS: Yes. Thank you so much for the presentations, and, yes, I will take a compost bin so I can get started. And you can sign up my colleagues as well here, Councilwoman Blondell Reynolds Brown and also Councilman O'Brien. And actually I found out about your company through the hard work that was done through Councilman Denny O'Brien's office and his staff. I think a number of them are already using your service and composting. And so I just want to say to the Councilman, thank you for the introduction and for the bin.

This is so very important, and the more we can expand what people are doing in their own homes, it really is going to have an effect. It's going to have an impact.

We can't continue to do things the way we used to do, and I know that change is hard and most people don't recognize or even really understand the need behind composting and why it's so important, and I think it's really up to all of us to set the example and to do it in our own homes and our own lives and to spread the word and get it out there. This is not something that is optional. This is something that we really do have to do. It's good for our city, it's good for our world, it's good for our environment, it's great for our children. And the sooner that we can get all of our young people involved and engaged in composting, in recycling, the better off our whole world will be all around.

So thank you so much, everyone,

for your testimony.

(Applause.)

COUNCILWOMAN BROWN: Gentlemen, what I will add is this entire hearing justifies, defends or validates why we needed to make this office permanent, number one.

Number two, you spoke of regulations can sometimes inspire us to act. Incentives for those who see the glass is half empty and naysayers and the like, sometimes incentives inspire us to act as well. So when we think about how we can move this needle -- because, as Councilwoman Bass said, in my view, it's really not about us at all. It's about our children and grandchildren and, in an idealistic way, trying to save the planet.

So what incentives might you consider, think of, propose, recommend to move this needle in the way that we would like to see? Any one or all of you speak to that briefly, incentives that

government can offer to inspire consumers, citizens, residents to get involved and get engaged.

MR. HAMBROSE: The recycling business, this trouble that people talked about today with contamination, we don't get clean streams of any recyclables without strong education and partnerships with our municipal partners. So enforcement and education would be very helpful to your existing recycling programs and anything you choose to do in the future. I don't know if that amounts to an incentive, but without a clean stream of material, all of these options that you heard about today have a difficult time succeeding.

COUNCILWOMAN BROWN: Very instructive.

MR. CHRISTIANSEN: There are three in particular that we're working with cities around the world on and also in the U.S. One is -- in the U.S. there are several dozen cities that have had a

building code requirement for disposers for decades dating back to when they came into the market in the '60s. And so that's a potential interest. Much like you have to do certain other things under the building code, having a disposer might be one of those.

COUNCILWOMAN BROWN: A building code requirement for --

MR. CHRISTIANSEN: For the installation of a disposer. Much like a low-flow toilet or much like water sense devices or Energy Star appliances, like putting a disposer in that same category.

COUNCILWOMAN BROWN: Okay.

MR. CHRISTIANSEN: The other two, again, examples from around the world and we're talking with some of our U.S. city partners about them, one is a rebate program to accelerate the first-time purchase and installation or the upgrade. And the second --

COUNCILWOMAN BROWN: Rebate program offered by whom?

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MR. CHRISTIANSEN: Offered by a city and/or by manufacturers or some combination thereof.

And the second is a long-term financing program. There's a first-cost issue with installation of disposers in an existing home, and they can all then be $500 to install it by -- install a disposer, but it will last 10 or 12 years. So how do you sort of amortize that cost over a period of years. And we're talking with a couple of our city partners about ways to do that.

COUNCILWOMAN BROWN: Okay. Well, I'm a former educator, so folks have to hear stuff seven times. These children do, and sometimes adults do before we get it. So I support this notion of education and deepening that.

To our entrepreneurs there, what are your thoughts around this?

MR. D'ANTONIO: Well, for the commercial sector, the real incentive in implementing a program is lowering the

operating cost. Most people seem to think that food waste composting is about your trash, and it's really not. If you think about what you're doing, you're buying a significant amount of food, you're adding labor and benefits, and then you're throwing it away. By understanding how much you're throwing away and putting in processes to limit that, whether it be through better purchasing, better utilization, food donation to Philabundance or composting, you're becoming much more efficient, you're lowering your operating cost, and your incentive is you're putting more dollars in your pocket at the end of the day.

About educational campaigns, to let people know that it's not about your trash is probably more important than talking about your trash itself.

COUNCILWOMAN BROWN: Okay.

MR. BENNETT: As everyone talked about, education is obviously very

important. I think one thing that might be relatively easy would be to expand the City's recycling rewards program to reward the people who are using a private composting service or can demonstrate that they're doing composting on their own in some way to get additional rewards points towards that program.

If the City wants to take it a step further, then right now while the City is not providing service and there are private people who are providing the service and people -- right now people are taking the economic cost to do this. So they're paying money to do this and they don't get any kind of economic benefit. And so I don't know whether there are property tax rebates that can be looked at or other kind of tax rebates that can be credited against people's costs that they're putting out of their own pocket to help the City keep this waste out of the waste stream.

COUNCILWOMAN BROWN: Well, all

very worth exploring, and there's value in it coming from professionals like yourself who live and breathe this enterprise every day.

So thank you very, very much for your important testimony.

(Thank you.)

(Applause.)

COUNCILWOMAN BROWN: Our last and final panel -- and anyone else who desires to speak is certainly welcome to, but we would like to call up local projects and activities, including Chris Mullins of McGillin's Olde Ale House; Seth Budnick, University City Food Recycling Project; Jen Mastalerz -- forgive me -- City Sprouts; and Scott Blunk, Henry.crops. You're welcome to come to the witness table.

(Witnesses approached witness table.)

COUNCILWOMAN BROWN: In no way to cramp your enthusiasm, if you don't have prepared written testimony, we want

you to be cognizant to keep your comments as tight and concise as possible, because it's easy for us to wander given the strong interest in this topic. Okay? Very well.

Please, sir.

MR. BUDNICK: Hi. I'm Seth Budnick with University City District. Thank you, members of Council, for the opportunity to testify today and thank you especially, Councilwoman Bass, for raising this important issue and Councilwoman Blackwell for her support of our work. I also want to thank the staff of the Mayor's Office of Sustainability for their help in launching and sustaining our project.

COUNCILWOMAN BROWN: So just a friendly amendment. I adore Councilwoman Blackwell, but I'm actually Councilwoman Blondell.

MR. BUDNICK: Right. I know she's a member of the Committee.

COUNCILWOMAN BROWN: Oh, okay.

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Very well.

MR. BUDNICK: At University City District, we've successfully operated a small in-vessel community composting facility called The Dirt Factory for about two years on a formerly blighted vacant lot. The Dirt Factory was created in response to a clear need for additional composting capacity in the neighborhood. In previous years, UCD had distributed backyard composting bins to residents. The people who wanted to compost their food waste and lived in apartment buildings or in houses that lacked the necessary outdoor space had few options.

The Dirt Factory composts fallen leaves that UCD and neighborhood residents collect, together with food waste that's dropped off at the facility for free by neighborhood residents. On a typical week, we receive drop-offs from about 25 to 30 households, which translates into about 50 to 60 unique

households each month.

As others have alluded, it's worth emphasizing that these are people who go out of their way on sometimes cold and rainy nights to drop off their compostables purely because they believe it's the right thing to do. Through these drop-offs, we estimate that over the last two years we've kept roughly 17 tons of organic waste generated by about 300 households out of landfills.

This material is composted over the course of a few months into a high-quality organic material that can be applied as a soil amendment. We had heard from community gardeners that one of their biggest obstacles to growing more healthy food was obtaining a supply of compost. So our compost is distributed for free to community members for use in their gardens, including many community gardens, and the remaining material is also used by UCD for landscaping projects in the neighborhood.

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Each week I spend an hour at the facility accepting drop-offs, and people very frequently tell me that they had previously wanted to compost, but were unable to do so. In fact, more than 50 percent of Dirt Factory users report that they had not composted before.

We hold regular workshops on composting and gardening at The Dirt Factory, and those are always well attended, as interest in composting seems to be growing year after year.

In the last year, we've partnered with the U.S. Environmental Protection Agency to identify opportunities for increasing composting among University City residents, businesses, and institutions. We keep close track of where our drop-offs come from, and based on those data, I can say that there is clearly enough demand to support additional facilities like The Dirt Factory elsewhere in University City.

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While most of our drop-offs come from within a few blocks of the facility, we also have users who take the El from Fishtown, who bike from South Philadelphia, and who come from other locations all over the City. It seems clear that there's a need for additional composting capacity throughout Philadelphia, and we hope that our experience at The Dirt Factory can provide useful context as Council considers the potential for an expansion of composting in Philadelphia.

Thank you.

(Applause.)

COUNCILWOMAN BROWN: Good afternoon.

MR. MULLINS: Good afternoon, Councilwoman Blondell Reynolds Brown and Councilwoman. Thank you for inviting us here today. I'm Chris Mullins. I'm the owner and operator, along with my wife and son, of McGillin's Olde Ale House. We are the oldest Irish pub in the City

of Philadelphia. We are also the greenest Irish pub in the United States. Less than 10 percent of our waste ends up in landfill on a regular basis.

We have been composting since March 17th, which I know Councilman O'Brien realizes is Saint Patrick's Day, 2013.

One question you may have for me as an operator, because many of the thoughts that have been expressed by the earlier -- one of the advantages of being the last panel is almost everything that needs to be said has been said. It's the differences -- I'm going to bring it down to the concrete level. I'll interpret those global abstract concepts into something specific and applicable to a business.

So you might say to me, Why are you composting? It's not required by the City or any other regulatory agency. Well, the second reason that we're composting is because it's the right

thing to do, and that's why we do it. The first reason is because we do have a problem on our block in Center City Philadelphia and I know from talking to Councilman Squilla in the past and other Councilpersons, there are similar problems throughout the City of Philadelphia. Our sustainability policies were borne out of necessity.

For years, with the explosion of redevelopment in Midtown Village came about the explosion of new dumpsters. That's the topic of another conversation, I'm sure. These dumpsters are unsightly, they're smelly, they attract the homeless, they attract drug use, they attract rodents, they are virtual public toilets.

Drury Street for a long time became dumpster alley. We still are. In fact, we have 16 dumpsters and ten totes in this little -- the smallest street. It's the shortest street in the City of Philadelphia and we have 26 receptacles

for the various businesses. We are the only business on Drury Street.

COUNCILWOMAN BROWN: What street is that?

MR. MULLINS: There are 16 dumpsters and ten totes on the public right-of-way and in private property. So we were the only business there. There is a garage next to us and on the corner there's a business.

As businesses proliferate and trash piled high, we reached our breaking point and we reached out and found Maurice Sampson, who was in an earlier panel, and asked him to help us with this issue. He and his team developed a plan for our block to centralize the recycling, compost, and trash. This a large project with long-lasting and positive results, but very complex and expensive.

We retracted slightly and decided to retrench and implement all the policies we hope will be instituted for

the street within the boundaries of our own four walls. As those of you who have had business people come before Council, you know how vigorous opposition from the business community can be when you do things. Well, it's like hurting squirrels. Very hard to get them to cooperate. So we decided to have a zero waste policy. Nine percent of our trash goes to landfill. We recycle and compost 91 percent of all our waste. We replace plastic souffle cups, soda cups, beer cups, and straws with a corn-based compostable material. The process is not rocket science, but it does require ongoing training. They are slightly higher fees for the removal of the compostable material. However, this is declining as more and more businesses sign on for the compost.

We always say that if we can do it, anyone can. We're not rocket scientists. We're restauranteurs and barkeeps. We are high volume. We're

very fast-paced. We have lots of trash. We use a lot of disposable goods, whereas most restaurants use china and glassware.

We did not force this to work. Our employees signed on from the very first day. We have a very diverse group of employees, 65 employees, everything from high school dropouts to people with multiple graduate degrees, and mostly young, and they signed on very rapidly and enthusiastically. We knew that they would sign on for this because they knew it was the right thing for the environment.

I did bring a couple of props. They talked earlier about -- and the last slide I think was probably the most important slide of that last presentation, and it said City policy to develop diversified infrastructure. That means that we need to have -- diversified organic is our -- Organic Diversion is our company that does our hauling, and we're very pleased. They do an awesome

job, good service, et cetera, but there's a very limited number of haulers right now, and as you well know, in a capitalist society, we need many buyers and many sellers in order to make capitalism work. So there is a very small number of those people.

We need better trucks. Not the their trucks aren't adequate, but there's only a few suppliers of that.

Products, this may look like a little plastic straw. They talked earlier about contamination. We're not talking about toxic materials. We're talking about plastic straws. These are not plastic. These are made from corn starch. There is no local supplier right now to sell these to us. We have to order these online.

The same thing -- now, fortunately -- these look like plastic cups, but they're not. They're made from corn starch. We are able to get them, but they're three times as much as the

regular plastic. So there will be costs to individual businesses, and I want to counsel Council or advise Council to be aware of that, that we can't rush too far or too quickly before the infrastructure is developed where suppliers have these products for us and we have the haulers that can take away our trash.

I'm Irish. I try to be brief, but it's sometimes hard.

COUNCILWOMAN BROWN: I'll wait until you all finish.

Good afternoon, sir.

MR. BLUNK: Thank you for this opportunity. I'm not going to mess up your names, but I also need to apologize for my phone ringing. I shouldn't have a phone. I'm just one of those people.

My name is Scott Blunk. I live in Mount Airy. For the last three years, I've been very, very fortunate to work with a high school in Northwest Philadelphia, W.B. Saul, through a cooperation with W.B. Saul High School,

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Weavers Way, and the Philadelphia Parks District.

I'm going to answer basic questions. I was given a "tell me what you're going to say" and I'm not a "write down things," but I am Irish, so...

I'm going to tell about our project at Saul in numbers, and these are all numbers over the last 12 months at a little high school on three-quarters of an acre in the middle of the City with neighbors 106 feet away. They've paced it off, and so have I.

In the last 12 months, we have diverted 967 tons of waste, diverted. It has not left the farm. We have four major partners. We have, of course, W.B. Saul, part of the School District, with their students and their staff. We have Weavers Way. We work very closely with Bennett Compost, who you've already heard from Tim, and we also now work since April with the Philadelphia Zoo. We also have innumerable numbers of coffee shops,

the school cafeteria across the street, our CSA members, small brewers who bring us their brewers grain for the dairy cows, and what they don't eat, we get on the compost site.

We also are excited about a new partnership with the EPA. We have joined their Food Recovery Challenge through Weavers Way. We also recently -- in fact, just earlier today -- have agreed to take care of the composting for the Philadelphia Marathon. So nine Saul students will participate in the marathon, come back to the school on Monday morning, and will help the marathon people compost their compostables.

The amount of finished compost that has left the school to go to urban farms, gardens, and pastures is 630 cubic yards, or 756,000 pounds. We have delivered compost to the Morris Arboretum, to Awbury Arboretum, Teens for Good, PHS, Central High School, Lankenau

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High School, Penn State Demonstration Gardens, and over 300 additional customers. The students also bag the compost, and it's sold at Weavers Way stores, Stanley Hardware, and other places.

We also have a large number of students who participate in our activities. I asked the student coordinator today how many students have spent time on the compost site in the last year. They think over 2,000 have visited the site from schools all over Philadelphia. We had four groups this week. We have two more groups already this week. Students from AIM Academy are spending a week at the school.

Number of W.B. Saul students, Saul has an enrollment right now of 575 students. Two hundred and sixty-four will spend time on the compost site every week. And when we talk about education and trying to find the people who can train others to do composting, we hope

that many of these 264 students will earn their PSU backyard composter certificate.

The last question I said I would answer is the number of baked potatoes that you have been able to bake in the compost pile this week already is four. A group of 10th graders have been working on temperatures for me for the last month, and they decided that it was hot enough in one spot to bake sweet potatoes, and they were successful. They were also able to help the students from the AIM Academy when a shy 10th grader, who it's hard to get any words out of him at all, spent ten minutes explaining to these 11-year-olds about his science project. Saul is doing the education with the support of Weavers Way and all of our other partners.

Thank you for letting me tell you about that.

(Applause.)

MS. MASTALERZ: Good afternoon, Council. My name is Jennifer Mastalerz.

I am the owner of City Sprouts. I am a for-profit, fairly new business operating in Kensington, Fishtown, Northern Liberties neighborhoods, and I provide community compost collection for businesses and also a residential drop-off program. I am one of those pedal collectors that Brenda showed you in her presentation. So I do my collections with a bike and a trailer. For the businesses we are only operating in a mile and a half radius, and I collect from 13 restaurants and businesses in that neighborhood. And my residential drop-off program is similar, very similar, to The Dirt Factory in terms of its technology of how we do the composting.

I provided -- you have a graphic that I provided that kind of lays out my operations, but just to kind of be a little cheerleader for the Kensington neighborhood and its interest in composting, we have about 50 households

who pay me to drop off their compost at my site, and about half of them volunteer with me monthly. So if that isn't a testament to the interest in composting in the City, I'm not really sure what is.

I think that's it.

(Applause.)

COUNCILWOMAN BROWN: Council Lady, any questions for this panel?

COUNCILWOMAN BASS: No questions for this panel, but thank you so much for the graphic, because I know that it really does make the process much easier to understand. Composting I think can be intimidating if it's your first time or you've never done it before. So I thank you for that, and I thank all of you for your testimony and for the information. So thank you.

COUNCILWOMAN BROWN: My delight is that you're Philadelphia based, and it really does matter that we have citizens and business people, enterprises in the City that are already doing this.

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I know exceedingly well the wonderful work of W.B. Saul High School given their connectedness to Penn State University and the mission of -- early mission of that institution.

So I'm hopeful that we have testimony that if you don't have it today, you can submit it, right? Because we actually do read this and we use it for our next steps. So there was a PowerPoint. Someone promised us a copy of the PowerPoint as well. Is she still here?

(Audience member speaking without microphone.)

COUNCILWOMAN BROWN: Okay. Thank you very much.

We thank all of you for your testimony.

(Applause.)

COUNCILWOMAN BROWN: RecycleNOW, Ben Ditzler, please join the witness table.

(Witnesses approached witness

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table.)

MR. DITZLER: Good afternoon. I'll try to be fast because I know we're running out of time, but my name is Ben Ditzler. I'm from RecycleNOW Philadelphia. I'm a volunteer with RecycleNOW Philadelphia. I was actually here testifying eight years ago for the last hearing we had on recycling, and it was about recycling much more in general, but I'd just like to take you guys back to the state of recycling at the time, if you guys remember how bad recycling was eight years ago. There was no plastics, there was no cardboard, there was no recycling rewards. Recycling was every other week. It was extremely confusing. We have come so far in eight years, in this eight years' time. There's no doubt what is next, what is on the horizon for recycling in general. I mean, it is organics and beyond.

I'm actually surprised we did not hear more about the concept of zero

waste. I mean, it was mentioned a few times. Zero waste really is the construct that everything is based around.

Specifically when I testified here eight years ago, I spoke to the importance of recycling to youth. And actually, Councilwoman Reynolds Brown, I actually addressed you when we were talking about youth, because I know this was an important issue to you.

I know, Councilwoman Bass, you were just talking about this is an important issue to youth.

Kids love this stuff. Kids -- they are passionate about that. I mean, when it comes to compost, I mean, it's getting your hands dirty. I have a worm compost bin in my basement. That's another type of composting.

COUNCILWOMAN BROWN: You have a what?

MR. DITZLER: I have a worm composting bin. Again, I'm surprised

that has not come up, but it's another form of composting.

COUNCILWOMAN BROWN: I just want to make sure I heard what I think I heard.

MR. DITZLER: It is worm composting, yes. So worms eat my garbage. There's actually a book called that. But it's, again, yet another form of composting, and it's one of those things that people get squeamish about, but if you put a kid next to it, they want to get their hands dirty and they love it. They love it so much.

So as much as we can do to get this into the schools, get kids talking about this, this is an issue for kids, for youth, and for young people, for all of the above.

Thank you.

(Applause.)

COUNCILWOMAN BROWN: Indeed. Thank you very much. The enthusiasm universally with all the panelists is

contagious. It's really exciting.

Please. Welcome back.

MR. ROLES: Thank you. Thanks for your time, Councilwoman Bass, Councilwoman Reynolds Brown, Councilman O'Brien. I'm Michael Roles with the Clean Water Action. We're actually a Steering Committee member of RecycleNOW Coalition, and actually our telephone number is also the hotline number that you'll find on the RecycleNOW website, and every week I field phone calls from residents, your constituents, and just as it is your job, it is my job to listen to the residents of Philadelphia.

So I just want to summarize. We're fielding a variety of calls and concerns from a wide range of neighborhoods in Philadelphia, proving that Philadelphia can improve how it manages its waste. But while we are working toward addressing the existing programs that are in place, we also believe that a citywide organics

recycling program has the potential to be a win-win for Philadelphia.

I've also submitted my written testimony. So I'm going to try to summarize what is included.

We believe that this is a priority that should be a priority among Councilmembers here as well as the Mayor's Office as well as our City departments. Obviously this is something that we need to zero in on to reach our vision of zero waste.

However, there is a broad variety of factors that we need to consider when developing the right kind of organics recycling program. You've heard in the previous speakers, but environmental impacts, of course. There are reasons why certain factors can result in a counter-intuitiveness toward making this the greenest city in the country. Obviously infrastructure in terms of markets, making sure that we're balancing supply and demand properly in

order to get us there.

And also I just wanted to emphasize that -- Councilwoman Reynolds Brown, you brought this up a little earlier. But equitability is the key factor that needs to be woven into every single element throughout this entire process. It needs to be examined when looking at --

(Applause.)

MR. ROLES: Thank you.

Needs to be examined when looking at costs, investments, education, working conditions, and the siting of these facilities. But with a wholly equitable citywide organics recycling program, residents, business owners, workers, and the visitors of Philadelphia will win with this kind of program when done correctly. "Done right" are the key words when putting this program together.

Once again, the economic benefits and potential for the City to make this a leap towards zero waste make

this issue an imperative, but only after a thoughtful process with careful consideration of a multitude of key variables.

Given these facts, Clean Water Action is strongly urging an open and transparent process throughout the development of an organics recycling program. Comprehensive engagement needs to happen with interested residents, businesses, officials, and other cities with similar programs, and only through this kind of transparent dialogue will we be able to design the right program for Philadelphia.

Clean Water Action is making -- we're available as a resource for you all. We're willing to work with you every step of the way.

Once again, I want to thank you for your time tonight.

(Applause.)

COUNCILWOMAN BROWN: You're welcome, gentlemen. Thank you very, very

much.

Is there anyone else that would be interested in providing testimony or remarks on Resolution No. 140626?

Seize the moment.

(Witness approached witness table.)

MS. BAUGHMAN: Thank you very much. I'm going to be very brief, but I --

COUNCILWOMAN BROWN: Give us your full name first.

MR. BAUGHMAN: My name is Lisa Baughman and I am a homeowner and resident in Manayunk, and I am speaking basically because I'm -- no one who is just a resident of Philadelphia has spoken yet.

So I am a person who gratefully pays Mr. Bennett's company every month for my compost pickup, and I do it because it's the right thing to do. I'm a little bit different than maybe most people. I'm very passionate about the

environment. I have a Master's in environmental studies, but I really do it because I care. And I find -- one of the things that I have found that I'm really looking forward to with the expansion of recycling or of composting is my role as a homeowner with a garden. I have a garden that is very small. I'm in Manayunk. So I don't have a place to compost myself, and yet I do want to do my bit to make the City more beautiful and I also want to do my bit to help with stormwater runoff, and I look forward to having more opportunity to compost my garden waste as well as my food waste.

COUNCILWOMAN BROWN: Well, thank you very much for your testimony and for seizing the moment on this resolution.

Any final --

(Applause.)

COUNCILWOMAN BROWN: Any final remarks or observations from the sponsor of the resolution, Council Lady Bass?

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COUNCILWOMAN BASS: Well, again, I just really want to thank everyone for being here, for toughing it out. I know we got a late start because some of the other hearings were running a little bit behind schedule, but it was well worth the wait, from my perspective anyway. There was just such a wealth of information that's been provided, and we really do intend to take that information and make it useful, make it useful to all of our citizens and finding ways to really do the right thing, as the young lady who just spoke said. This is not about what's popular or some other reason to do it. This is about doing what's right, what's right for our city and for our future and really for our children.

And so I'm looking forward to getting my composting bail and getting started with that and working to sign up my colleagues, and we should talk about trying to find ways to, you know, maybe --

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COUNCILWOMAN BROWN: We should lead by example.

COUNCILWOMAN BASS: Lead by example, but also we should find ways to make sure that we have composting opportunities right here at City Hall. We all eat. We eat lunch, we eat breakfast, we eat dinner. And so --

(Applause.)

COUNCILWOMAN BASS: -- where does that waste go? Right now it goes in the trash can, but we can do something about that. And we have the information now, so there's no excuse. We should do something about it.

So I just really want to thank everyone for being here, and this is really helpful and useful information and this has just really been a good day. So thank you for being here.

(Applause.)

COUNCILWOMAN BROWN: Again, my salute to the sponsor of this resolution. The information as a former teacher and a

student learner, today has been very, very exciting, and it should not go unnoticed that it was first President Kennedy who talked about the vulnerability of our planet, and today certainly underscores that.

Thank you very, very much for your testimony.

This hearing led by -- this joint committee led by Streets and the Environment is now adjourned.

Thank you very much.

(Committees on Streets and Services and the Environment concluded at 5:15 p.m.)

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CERTIFICATE

I HEREBY CERTIFY that the proceedings, evidence and objections are contained fully and accurately in the stenographic notes taken by me upon the foregoing matter, and that this is a true and correct transcript of same.

MICHELE L. MURPHY
RPR-Notary Public

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