## Atkinson-Baker Court Reporters

www.depo.com


## Atkinson-Baker Court Reporters <br> www.depo.com

| 1 | appearances <br> FOR DEPARTMENT OF PUBLIC WORKS: Mohammed Nuru, Director <br> Julia Dawson, Deputy Director of Finance and Administration Jose Pujol City Hall, Room 348 1 Dr. Cartton B. Goodlett Place San Francisco, CA 94102 | 1 | E X H I B I T S (CONT'D) |
| :---: | :---: | :---: | :---: |
| 2 |  | 2 | NO. PAGE |
| 3 |  | 3 | 94 Abandoned Waste - Volume of Service.......... 706 |
| 4 |  |  | Orders by Day of Week [City] |
| 5 |  | 4 | 95 Abandoned Waste - Volume of Service.......... 706 |
| 5 |  |  | Orders by Hour of Day [City] |
| 6 | FOR DEPARTMENT OF THE ENVIRONMENT: Robert Haley, Zero Waste Program Manager 1455 Market Street, Suite 1200 | 5 | 96 Analysis of AMC/BIR Service Orders........... 710 |
| 7 |  |  | [City] |
|  |  | 6 |  |
| ${ }_{9}$ |  | 7 |  |
|  | San Francisco, CA 94103 <br> FOR OFFICE OF THE CITY ATTORNEY: Manu Pradhan, Deputy City Attorney Thomas Bruen, Of Counsel City Hall, Room 234 | 8 |  |
| 10 |  | 9 |  |
| 11 |  | 10 |  |
|  | FOR THE RATEPAYERS: | 11 |  |
| 13 |  | 12 |  |
|  |  | 13 |  |
| 14 | Arnold \& Porter Kate Scholer LLP |  |  |
|  | Three Embarcadero Center | 14 |  |
| 15 | 10th Florr San Francisco, CA 94111 | 15 |  |
| 16 | San Francisco, CA 94111 | 16 |  |
|  | Garth Schultz | 17 |  |
| 17 | John PorterMark Arsenault | 18 |  |
|  |  | 19 |  |
| 19 | Lean Negron ${ }_{\text {MEMBERS OF THE PUBLIC: }}$ | 20 |  |
|  | David Pilpel Tracy Thompson | 21 |  |
| 20 |  | 22 |  |
| 21 |  | 23 |  |
| 23 |  | 24 |  |
| 25 |  | 25 |  |
|  |  | Page 618 | Page 620 |
| $\frac{1}{2}$ | INDEX PAGE | 1 | Wednesday, April 26, 2017 8:09 a.m. |
| 3 | WITNESS: Garth Schultz PAGE | 2 | PROCEEDINGS |
|  | EXAMINATION BY MS. DAWSON...................... 625 EXAMINATION BY MR. AAKER................. 652 | 3 | DIRECTOR NURU: Okay. Let the hearing please |
|  | EXAMINATTON BY MS. DIIGER...................... 670 | 4 | come to order. |
| 5 | EXAMINATION BY MR. HALEY $\qquad$ 674 | 5 | Good morning, everyone. I am Mohammed Nuru, |
| ${ }_{7}^{6}$ | RE-EXAMINATION BY MR. BAKER...................... 679 | 6 | Director of the Department of Public Works for the City |
|  | EXAMINATION BY MR. BAKER........................ 682 | 7 | and County of San Francisco. Let the record show that |
| 8 | EXAMINATIIN BY MS. DAWSON..................... 700 | 8 | today is Wednesday, April 26. The agenda for today's |
|  | EXAMINATION BY MS. DAWSON. $\qquad$ 706 | 9 | hearing is on the table. |
| 10 |  |  |  |
|  | public Comment by tom williams..................... 719 PUBLIC COMMENT BY DAVID PILPEL.. 719 PUBLIC COMMENT BY TRACY THOMPSON.................. 726 | 10 | Today we're continuing the Director's hearing |
| 11 |  | 11 | on Recology's application for an increase in residential |
| 12 13 |  | 12 | refuse collection and disposal rates. On April 14th, |
| 14 | exhibits | 13 | staff from the Department of Public Works and the |
| 15 16 | NO. <br> PAGE <br> 624 | 14 | Department of the Environment issued the Staff Report. |
|  | 85 StopWaste Memorandum........................ 624 [Public] | 15 | Copies are also available on the table. The report |
| 17 | 86 Drivers of Proposed Increase.................. 625 [City] | 16 | recommendations are the focus of these final three |
| 18 | 87 Percentage Change in Monthly Rates............ 631 [City] | 17 | hearings. I will hear testimony, cross-examination, and |
| 19 | 88 Summary of Rate Impacts by Account Type....... 632 [City] |  | rebuttal of the Staff's recommendation, and consider all of the evidence including public testimony before making |
|  | 89 Comparison of Major Service Mixes............. 639 by Number of Units [City] |  | my recommendation. |
| 20 | 90 Alternative Rate Structure Scenario........... 643 [City] | 21 | Today's hearing is being transcribed, so I |
| 22 | 91 Customer Communication Tracking Report........ 683 [Recology] | 22 | want to remind everyone who speaks to come forward and |
| 23 | 92 Recycling Chute photograph................... 690 | 23 | speak clearly into the microphone so that we can capture |
|  | 93 Apartment Recycling Station photograph........ 690 | 24 | your entire testimony. |
|  | [Recology] | 25 | Before we start the hearing, I'd like the |

# Atkinson-Baker Court Reporters <br> www.depo.com 

```
Public Works clerk to make an announcement concerning the Department's efforts to comply with Title VI of the Civil Rights Act and ask the corporation with a public participation survey.
Mr. Pujol, please proceed with your
announcement.
MR. PUJOL: Jose Pujol.
Title VI of the Civil Rights Act requires
equal and equitable access to San Francisco Public Works program activities and services. To document that the Department is in compliance with Title VI, we ask that everyone attending and participating in today's hearing complete a public participation survey. However, this survey is optional and completing it is not required for participation. The data that you provide will be analyzed and used to ensure residents and stakeholders in the community are involved in the refuse rate hearing process. The information will not be used for any other purposes. You will find this survey on the sign-in table. Please place completed survey forms in the collection box.
Thank you.
DIRECTOR NURU: Thank you, Mr. Pujol.
Let me briefly outline the order of business
for today. We will begin with the testimony from the
```

Page 622

City's financial consultant on analysis related to the proposed refuse rate structure and the evaluation of Recology's revenues and expenses as described in the Staff Report, as well as testimony from Recology on the rate proposal.

We will then offer the opportunity for cross-examination by City staff, Recology, and the Ratepayer Advocate. The Companies will have the opportunity to provide additional testimony and evidence in response to the Staff Report.

We have a final hearing scheduled for May 3. As in prior hearings, we will reserve the last period of each day for public comment. You may also convey your comments to Ms. Rosie Dilger from the Ratepayer Advocate.

Are there any questions? If not, I would like to ask Ms. Dawson of Public Works to call her first witness. Julia, will you please proceed with your first witness.

MS. DAWSON: Indeed. I'd like to invite Garth Schultz. But while he's coming up, I have an exhibit that's been requested to be introduced by a member of the public, David Pilpel. It's around the work on the digester in Alameda County. So while Garth is moving his way up here, I'd like to introduce this exhibit.

Page 623

MR. PRADHAN: This will be Exhibit 86.
(Exhibit 86, "Drivers of Proposed Increase
[City]," was admitted into evidence.) BY MS. DAWSON:
Q. I'm wondering if you could at least just touch briefly, Mr. Schultz, on the kind of work that R3 did perform on a review of the revenues and expenses in the

Page 625

Atkinson-Baker Court Reporters<br>www.depo.com

```
Recology application.
    A. Yes. So as a part of our work for the City
on this project, we reviewed the entirety of Recology's
rate applications for Recology San Francisco and for
Sunset Scavenger/Golden Gate. We reviewed each line of
the model that was prepared and presented by the
Company, looking at individual lines of expenses and
revenues making sure that mathematical assumptions work,
that the math throughout the entire document is logical
and makes sense and is reasonable. And then for the
major categories of cost drivers as well as revenue
drivers, working with Recology staff who were responsive
to our requests on supporting documentation for things
like health care, workers' compensation, insurance
factors, salary factors -- really, you know, the
background information on which their calculations in
the rate application is grounded.
    Q. And so before I go any further, I should have
asked you. Can you please kind of introduce yourself
and describe your professional experience and that of
your company in refuse rate-setting and your background
and role overall on the project?
    A. Absolutely. So R3 Consulting Group is a
consulting group that exclusively serves municipal
agencies on the matters of solid waste and recycling
```

Page 626
consulting -- everything from procurements through planning documents, including operational reviews and detailed financial reviews such as this one.

Our role here was to assist City staff in the evaluation of the overall rate application to ensure that it was logical, well-calculated, reasonable, and supportable. Our company has 15 years of experience doing this and I've been working in the field 15 -plus years myself.
Q. Okay, thank you. So we introduced the work that you had done in detail as an exhibit in the last hearing. And as a result of your work, we did make a variety of recommendations. But I think overall you could say that with the exception of some of the recommendations that we included in the Staff Report, that you found Recology's application to be supported and with good documentation and assumptions overall?
A. That's correct, yes.
Q. So let's talk a little bit about the drivers of the increase here. And you can see from this pie, so when you look at the figure here, we can see that a large amount of the, increase about $\mathbf{2 8 \%}$, is described as "Business as Usual."

What did that mean from your perspective?
A. Yes. So when we created this, this was a
high-level overview meant to show comparisons between the types of drivers within the rate application itself.

So "Business as Usual" for us were any of the categories that weren't clearly linked to things like the new landfill agreement, change in composting costs, new programatic costs proposed by Recology in the rate application such as the switch from dual-stream garbage and recycling cling to a single-stream recycling, getting additional capacity for the city.

So the "Business as Usual" is really anything that was just standard cost adjustments over time that weren't clearly attributed to some other change.
Q. Okay. And then we come to the next category, which is "Change in Participation to Existing Programs." That's 24\% of the increase. Can you describe that a little bit?
A. Yeah. So we liked at the staffing models and the head counts and the costs associated with those that were proposed by Recology, including the rate of change over time since the rate application was -- the last rate application was approved for 2014. And this is something -- these are the categories in which there's been some natural growth due to increases in participation. This includes things like the BIC program, the AMC program, participation in drop-off at Page 628
the transfer stations, and natural growth within the overall composting, recycling and trash collection sphere.
Q. And likely because this has been a period of growth for the city as well?
A. I would say so.
Q. Okay. Going to the next category,

## "Implementation of New Programs." What is that entail?

A. So this category was really linked to the
proposed changes by Recology, the addition of the 23
additional drivers and routes and trucks for the change
in the curbside program implementation as well as other new implementation factors: increases in staffing for BIC and AMC, increases in staffing for outreach and education, other increases in programatic arenas that were clearly laid out within the application.

So new changes.
Q. Okay. And then "Capital Investments" is somewhat self-explanatory. "Composting Costs"?
A. The composting cost was related to the change in the composting-per-ton rate that Recology pays for the processing of the organic materials. That has gone up, and they explain that within the application that that's due to regulatory changes and constraints on that marketplace.

Atkinson-Baker Court Reporters<br>www.depo.com

Q. And then the green part, the $\mathbf{2 0 \%}$.
A. And this is directly related to the change in
the landfill agreement that's been previously explained
by Recology. It did result in a significant increase in
the per-ton tipping rate for landfill material through
the process they explained, but that's a pretty
significant chunk.
Q. So when we look at all these, if you add about $\mathbf{2 0 \%}$ of the green, $\mathbf{2 8 \%}$ of the blue, $\mathbf{2 4 \%}$ of the orange, you know, you end up with about almost 70\%. And then, you know, if we would think that the implementation of new programs is also somewhat driven by customer behavior as well as policy, the amount that would be considered more -- I'm not sure if the word "discretionary" is really right, but things that we really have the ability to move around, it seems somewhat limited.
A. I would say that that's true given the policy, aims of the City in the goals that Recology's looking to achieve within this rate application; that's correct.
Q. Okay, all right. So let's move on to more of a discussion around rate structure. And I am going to actually introduce a slightly-corrected version of an exhibit that is -- was Exhibit 68, which wasn't like it was exactly wrong, but it grouped things differently and Page 630

I think this is a probably more accurate view of the rate distribution between residential and apartment customers.

MR. PRADHAN: Ms. Dawson, is this
substantively different?
MS. DAWSON: No, it's new. Because the old
one had slightly different groupings. This is just --
MR. PRADHAN: Perhaps we should mark it as an exhibit?

MS. DAWSON: Yes, please.
MR. PRADHAN: Okay. So this will be 87.
(Exhibit 87, "Percentage Change in Monthly
Rates [City]," was admitted into evidence.)
BY MS. DAWSON:
Q. Okay. So this exhibit shows a distribution of customer rate increases under Recology's proposed structure, which is a fixed charge of $\mathbf{\$ 2 0}$ dollars per unit and then $\mathbf{\$ 1 0 . 4 4}$ for $\mathbf{3 2}$ gallons of trash and $\$ 5.22$ for each 32 gallons of recyclables and compostables.
So I'd like to start by talking about the residential customers; so those are the ones over here on the left-hand side, and talk a little bit about the distributions that we see.

So based on the way that the rate increase moves around between different customers, 55\% of Page 631

```
customers are going to experience an effective increase
of between either 0% to 16.4%, 9% of customers are
actually going to see a rate decrease, and 36% of
customers are going to experience a greater than 16.4%
increase.
    I'd like to talk about this in a little bit
more detail by introducing another exhibit that was
produced by R3, which goes over the summary of these
impacts, in particular, for the one-unit customer.
And then we're going to spend a little bit more time on
the more-than-one-unit customer.
    So this exhibit includes both.
    MS. DAWSON: Manu, if we could just mark this
as a new exhibit.
    MR. PRADHAN: This will be admitted as
Exhibit 88. And this is the "Summary of Rate Impacts by
Account Type" table.
    (Exhibit 88, "Summary of Rate Impacts
    by Account Type [City]," was admitted
    into evidence.)
BY MS. DAWSON:
    Q. So exhibit is two-sided. We're going to focus
first on the customers which are one unit. And
Mr. Schultz, can you walk us through this table?
    A. Yes. So this is a table we prepared
```

essentially summarizing information from Recology's rate model they shared with us that indicated how various groupings of service mixes, which is the second column in from the left, are impacted by the change in the rate structure as outlined by Ms. Dawson.

So the current service mix column, it's a bit coded and so I'll explain it. What that indicates is the number of units, the size of the trash container which is the number proceeded by the "T," the size of the recycling container which is proceeded by " $R$," and then the size of the composting container with the "111" on the end indicating that that's a one-unit customer with a 96-gallon trash/64-gallon recycling/32 compost, and they have one container of each. If you see other codes that indicate a "121" or a "122," that indicates multiple containers for that specific container type and size.

So what we sought to do with this is grouping them by customers with trash container sizes as indicated on the far left so that customers currently subscribing to a 96 -gallon trash, 64, 32 and 20 respectively. This represents the entirety of the universe for single-family residential accounts currently serviced by Recology in San Francisco. We show the number of accounts, the percentage of total Page 633

Atkinson-Baker Court Reporters<br>www.depo.com

accounts, and then the monthly rate they're paying now versus the monthly rate that they would be paying if the rates structure is approved.

And then we also further detail whether or not those customers are in a position to reduce their rate by reducing their trash container size, by recycling more or consuming less. Also whether or not they could reduce their rate by optimizing their recycling and composing either by better utilizing the containers that they have already, potentially downsizing those containers as a result of waste reduction, or other strategies.
Q. So I notice that you've highlighted one of these rows in yellow, and it appears that the biggest group of customers who're going to experience a larger--than-average rate increase are what we've discussed as the small-quantity generators; is that correct?
A. That is correct. So these are the folks that are currently in the 20-gallon, which is right now the smallest container size. Under the proposal, those folks would continue to receive the 20 -gallon size at the 16-gallon rate; so they'll receive a bit of extra trash capacity at no additional cost. They'll actually further receive as via the proposal a \$5-a-month additional credit from Recology proposed for the first

Page 634
year to mitigate the rate increases they would be receiving.

The reason they're highlighted is because they're in the smallest container sizes for each of the three streams. They don't realistically have alternatives to reduce their rate by downsizing or consuming less or producing less waste overall -- with the exception they were share accounts with someone else.
Q. Right. Although seeing that this impact is happening does kind of reflect the shift that Recology's mentioned that trying to move the rate structure overall to reflect fixed costs that they incur and not solely variable based on volume.
A. Yes, absolutely. And this is getting closer to that fixed variable balance overall. In the prior rate structure and rate structures in other communities, what we have seen is the fixed costs of the program are largely carried by the larger waste generators. And so this shift, in our opinion, is consistent with what we see happening within the industry. San Francisco is a leader in this. At this point, there aren't many other communities looking at making similar types of changes overall.

The result, though, is that the folks who are
currently subscribed to those low container volumes will start to pay more of their fair share, if you will, of the cost of the collection programs and all the other programs that are included in the rates that they pay, not just the collection of material from their curbside.
Q. So are there any other big categories of customer on this table that stand out, in your view?
A. I think the other largest categories -- and this is going to comprise $50 \%$ of the overall subscriber base for residential services, not just the single-unit services but also the multi-unit residential accounts -would be those who are currently in the 32-gallon trash container size. These are the subscribers that would have the option to migrate to the 16-gallon trash container with an upsize in their recycling containers in particular if they're currently in a 32/32/32. Those folks would receive additional volume at the same rate as if they were to keep their current subscription levels.

And it's a big chunk overall, but they're right around the average rate increase of $16 \%$. They further do have potential alternatives accept the downgrade or the downsizing from a 32 to the 16 . They could, if they manage the material as well or reduced the amount they produce of recyclables, keep a 32-gallon Page 636
recyclable can and potentially save $\$ 5$ dollars a month on that charge -- the difference between a 64 and a 32 for recycling.
Q. So I notice that this exhibit also shows about that about between $\mathbf{7 \%}$ and $\mathbf{8 \%}$ of single-unit customers will pay less under the proposed rate structure. What can you tell us about those customers?
A. Those customer are primarily those in larger trash container sizes -- now the 64 and the 96es. The 96-gallon customers will have a mandatory migration from the 96 to the 64. The 96 -gallon would no longer be offered; they would be moved to a 64-gallon, and their rate decrease is really consistent with what they would currently save if they were to do that same shift from 96 to 64. The rate for the 96 -gallon folks, the change in the rate structure isn't driving this as much as just that mandatory migration down to the smaller container size.

For the 64-gallon customers, they aren't having any change in their service subscription levels. As a default part of the rate application, these folks will save a bit as well, and that's primarily due to the overall decrease in the volumetric charge for trash in comparison to recycling and composting.
Q. Okay. Let's leave the "U-1," one-unit

## Atkinson-Baker Court Reporters <br> www.depo.com

```
customers, and move on to the table on the other side of
the exhibit which is kind of a review of customers with
between two and five units by group.
    Okay. So do you see anything similar between
the residential customers in one-units with customers in
two-to-five units?
A. There's similar overall trends. Although
within the service units within two to five range, the impacts are more spread out throughout the various service mixes. There are fewer overall service mixes and significantly fewer number of accounts compared to the single-unit subscribers. The trends are roughly the same in that we see some rate decreases for those in the larger trash container sizes, More steep rate increases for those in the lower waste-generating sizes.
But also I think a greater number of alternatives to note will be able to reduce their waste generation and therefore their rate by downsizing from their current trash container sizes or potentially their diversion container sizes by reducing waste or better utilizing the capacity that they have.
Q. But again, in terms of what's proposed in the rate application, those customers that are using the smaller trash size are offered the credit?
A. Correct. The rate application's calculation
```

Page 638
of the \$5-dollar-per-month credit does, in my
calculation, include these apartment customers -- sorry, not apartment customers, these U-2/U-5 customers.
Q. Okay. So when we look at the rates, we've also talked a little bit about what that might look like on not just an account count which is what we're looking at here, but more on a monthly rate per unit. And so I'd like to go ahead and move to a conversation on that, and I have a new exhibit to introduce.

MR. PRADHAN: That's a chart called
"Comparison of Major Service Mixes by Number of Units,"
one page. It will be marked as Exhibit 89.
(Exhibit 89, "Comparison of Major Service
Mixes by Number of Units [City]," was
admitted into evidence.)
BY MS. DAWSON:
Q. So in Recology's testimony, they talked about multi-unit accounts in some ways getting a different rate than single-family residences when you look at it on a per-unit basis. Can you walk us through your analysis of this information?
A. Yes. So in order to investigate that, we
looked at the primary service mixes -- current service
mixes that are in place now and took the four largest
standard service mixes both for single-unit dwellings as
Page 639
well as the multi-unit 2-through-5-unit dwellings. And those are shown on the left of this table. Those service mixes are $32 / 32 / 32,20 / 32 / 32$, and then further on down the rows with the larger overall container sizes.

Taken together, whether they're a single-unit through five-unit, these four service mixes comprise 80\% of the overall accounts in place within the city, and those are shown in the "Number of Accounts" column. So what we've done here is simply show the current monthly rate that is charged based on the information we received from Recology and then divided that by the number of units in order to come up with a current monthly rate per unit, indicating that four multi-unit customers on an individual per-unit basis for the same amount of volume of service that they receive at that account, that per-unit cost is a bit less. That said, they do have access to less service overall, but they're also required to have less service overall through the Ordinance.

We also then demonstrate what the new monthly rate, and that new monthly rate is calculated based on Recology's rate application proposal and we indicate the service -- the cost of service per unit under that. The trends are that the more units you have for that level Page 640
of service, of course, the less it is charged on a per-unit basis.

## Q. Right. Because you're distributing those

 fixed costs?A. You're distributing it over several units; correct.
Q. So among these multi-unit accounts, are there any other big customer types that stand out by being either above or below the average increase?
A. Yes. And I think this chart and the prior chart in our table both show that within the multi-unit, we see three main categories that are of a larger overall subscription basis. So we've got three categories that are above 2000 accounts apiece. Most of the other categories, the service mix categories have many fewer accounts that are subscribed.

So the primary ones are two-unit accounts. In fact, these are all two-unit account categories, some with a 64 trash, 64 recycling, and 32 organics. Their rate increase is less than the average at $\$ 12$ dollars per month and they do have further options within that to potentially downsize by reducing their consumption as well as better utilizing organics and recycling.

There's another category of subscriber there increasing by $\$ 19$ dollars a month. That's going to be

Page 641

Atkinson-Baker Court Reporters<br>www.depo.com

above the $16.4 \%$ average rate increase, and these are
folks who are currently in a 32/64/32. These customers would have the opportunity to move to the 16 -gallon trash and keep their 64-gallon recycling. They could further reduce their rate by reducing their recycling subscription by better utilizing it or reducing consumption.

And then there's a final category, two-unit customers that are currently in the 32/32/32 combination whose rates will increase by $\$ 20$ dollars a month. That's also above the $16.4 \%$ average.
Q. Okay.
A. There are other -- that's about 7,000 of the

18,000 overall multi-unit accounts, but there aren't any other large categories that stand out in quite this way.
Q. Okay, great. So when we've been discussing the rates over the last month or so, we've heard a lot of concern from the public and the Ratepayer Advocate about the increase and the fixed unit charge from \$5 dollars to 20. And so I'd like to at least kind of go through or review the detailed work that R3 performed and is reflected in a brief discussion in the Staff Report and more fully in their exhibit.

But I've extracted the pages that we're going
to go through and I would like to go ahead and introduce
Page 642
this as an additional exhibit just for ease of review.
MR. PRADHAN: This document is three pages of
tables. It will be admitted as Exhibit 90.
(Exhibit 90, "Alternative Rate Structure
Scenario [City]," was admitted into evidence.)

## BY MS. DAWSON:

Q. So what we've done is pull these figures directly from the report that was produced by R3 and introduced into evidence in the last meeting. So as part of the rate review and the work that we've been doing, we did look at whether there were alternative rate structures that had different outcomes or different or more even distributions between customers.

So I'd like to go ahead and start with this first table, which is Table 20 on page 65 of your detailed report, and it shows a number of alternative rate structures that R3 evaluated as part of its work. Can you please walk us through this table?
A. Yeah, sure. So what this indicates is we tested a couple different variables, and this is just a representation of what we adjusted within those variable sets. But the variables to play with were what was the per-dwelling-unit rate. It's currently at \$5; it's proposed at $\$ 20$. We looked at a couple midpoints along that range, $\$ 10$ and $\$ 15$ dollars and change, just to

1 A number of accounts -- a high number of accounts that are experiencing rate increases in the $30 \%$ range, in that very slightly depending upon the scenario, but what we were not able to do effectively via our playing with the values included in the rate structure was eliminate this impact to the customers experiencing that higher $30 \%$ or increase.
Q. And then higher, what we've been calling
internally the "double bump," that really reflects again the low-waste generators just like the proposed rate structure?
A. Correct. It's the low-waste generators and it's also this move towards including more fixed costs in the cost of service. Any increase in the per-unit rate to reflect that fixed cost helps keep that double

Page 645
> understand how much does the unit charge change affect the distribution overall.

> Then the other variables we looked at were -the current rate proposal has a $2: 1$ ratio of trash to recycling or composting volumetric charges whereas the ratio right now is 12:1; so we looked at other ratios within this. Really, we kept the half, the $2: 1$ ratio for one portion of this analysis and then we looked at a 3:1 ratio. We also -- and it's not included in this table -- looked $4: 1,5: 1,6: 1,7: 1$ ratios overall. And you can see the distribution of what would be the unit charge or the volumetric rates are included within this. So you can see at the very top row the various per-unit rates, and then in the middle sections, various options that were at least evaluated for the purposes of our report to the trash volumetric rate and the diversion volumetric rates.
> Q. So let's talk a little bit about more of the distribution of the rate increases of the scenarios that you looked at. So this is a figure that kind of shows it in graph form what those distributions look like. Can you speak to this a little bit?
> A. Yes, and we were a little surprised by this outcome. This is just for the four alternatives that were on the prior table. We saw very similar trends to Page 644

this graphically when we looked at other combinations as well. But ultimately, the basic distribution of which customer accounts and how many customer accounts are experiencing what level of rate increase is relatively similar throughout the various combinations. You end up with a high number of accounts that are experiencing a rate increase right at around the average rate increase, and then a consistent bump in accounts more around the $30 \%$ range that are also, you know -- let me rephrase that.

Atkinson-Baker Court Reporters<br>www.depo.com

```
bump there.
    Q. Right. Even if it's smaller than what's
proposed?
    A. Correct.
    Q. Okay. So this sort of follow-on table which
is in your report kind of just shows for the most
significant number of kind of customer accounts types.
Why don't you walk us through this table.
    A. Yeah. So for the three main categories of
account types comprising that nearly 60% or so of
overall accounts, when we looked at the alternatives,
so the "Proposed" column is the percent rate increase
that would be experienced by that specific service mix.
When we worked to adjust some of the alternatives and
play with some alternative scenarios, the overall
increase to that specific service mix wasn't that far
out of line with what their proposal is. We see some
increases in certain scenarios, some decreases in
certain scenarios for certain service mixes. But
overall, the overall trend is very similar, again,
regardless of the specific adjustments that we were
evaluating to the per-unit fee or the per-unit charge
and the volumetric charges.
    Q. Right. Again, so we've pretty much found this
similar structure, similar impact?
```

    Page 646
    A. Yes, exactly. Similar structure, similar impacts. And I think that one of the things that was notable in terms of our evaluation of working with the different charges, and this is something that Recology represented as kind of "finding the sweet spot."
We were able to somewhat reproduce that in that we able to see the largest number of customers at around the average rate increase via what they proposed. I didn't find another alternative that I thought worked better.
Q. Right. So that distribution really is about as optimal as we can be given policy direction that we're trying to achieve of de-emphasizing the trash and reflecting the true cost of service?
A. I believe so, yes.
Q. So you know, I'm sure that it's possible a kind of question like this would come up. Well, a more straightforward approach is why don't you just increase every rate component by the percentage that's needed to cover the cost, like the $\mathbf{1 6 . 4 \%}$ average? And then every customer experiences the same increase. But we're doing that and we talked about it a little bit, but I'm wondering given your experience in the industry whether you could speak to that a little.
A. Yeah, so many jurisdictions will simply take a rate increase and apply it evenly to all container

Page 646

1
types, all customer types, and it does a couple of things. One it does, it increases the gap between the rate for a lower waste generator that has a lower rate and a higher waste generator that has a higher rate. That gap continues to grow if you apply the rate increase consistently across, it's the same way that we see income caps grow in that same way.

So when you apply it evenly, you have a gap that grows between the lower rates and the higher rates. And even within most of those rate structures, currently including the City's current rate structure, is that there isn't a closely-correlated alignment between the rates people pay and the fixed cost of service, and that's been Recology's argument. If you apply the rate evenly in that way, you're only further growing that disparity so that you have the lower waste generators, the lower ratepayers not paying as close to a fair share component of the fixed costs and the higher waste generators bear more and more of that if you apply rates in that way.

We do see that there are many jurisdictions throughout California and the Bay Area in particular that are working to adjust their rate structures and modify them to achieve aims similar to what's being sought here. Those are -- they apply some different Page 648
strategies. This strategy, I think, is the most direct and I think actually fairly transparent, and it is a bit ahead of the curve in terms of what we're seeing for other communities.
Q. Okay. So let's talk a little bit more about the fixed cost piece. We did touch a little bit at the beginning more on what's driving the rate increase, but I do want to talk about -- Recology has stated in their evidence that a significant portion of their collection and processing costs are fixed. That is, they don't change regardless of the actual volume of material collected. So I'd like to ask you just a few more questions around this topic, and I would like to refer -- and I'm not going resubmit it -- Exhibit 43, which was submitted by Recology, and the particular exhibit was titled "Fixed vs. Variable Cost Analysis" and it was prepared by Armanino.

Did you look at that report? And can you kind of summarize what your professional view is of that report?
A. Yes, we did. And I do have it in front of me here. What it summarizes is there's approximately a $60 \%$ to $62 \%$ portion of the Companies' costs that are attributed as fixed, and about 38\% -- and I'll round up

Page 649

## Atkinson-Baker Court Reporters <br> www.depo.com

looked at the specific categories that are included as
being fixed versus variable, and in fact the methodology
for some specific line items apportions them between
fixed and variable based on some formulas that are outlined within the report.

And the end result, this 60\% fixed and $40 \%$ variable, is not out of line with what we see in other detailed rate reviews like this and in other just jurisdictions and also in our own experience having worked in and managed operations -- albeit them smaller scale operations to Recology's -- but certainly it's in alignment with our understanding of what the real cost of doing business in the industry is.
Q. Okay. And so one just kind of final point on this topic. Turning back to the application itself, in the narrative summary Recology talks about 32 programs that it currently operates in San Francisco between collection companies Sunset Scavenger and Golden Gate and the processing and disposal company which we'll call Recology San Francisco.

So based on the description in the application itself, do you think it's reasonable to conclude that the cost of some of these programs are essentially fixed costs and they don't vary with the amount in volume of materials collected and processed?

Page 650
A. I would say that's accurate. I think that the costs will vary slightly within accordance to the amount of material they're processing. But just to operate those programs and to plan for that variability, you need the a base level infrastructure and staffing and other costs within that. And realistically, the variation that we talk about in terms of program participation and things like Household Hazardous Waste and others is somewhat minimal in comparison to the overall amount that they're handling. You may see variations swinging month-to-month of season-to-season, but if folks were to not produce any of that stuff, yes, we would have a true variable cost there that we could adjust over time.

But given reasonably-consistent participation levels or even increasing participation levels, the base costs of the infrastructure and the staffing to keep those programs available and accessible for customers is essentially a fixed basis. You've got to keep it open at the hours that are agreed to and staff it during those hours and pay the cost of the infrastructure and the utilities just to have that as an available resource.
Q. Right. And those programs are available to all customers and kind of support the responsible Page 651

```
disposal of certain items and also accessible services
to the public when they need to go to the transfer
stations, for instance.
    A. Correct. And then that would be reflected in
the fixed charge components of their rates.
    MS. DAWSON: Okay. Those are all the
questions that I have.
    DIRECTOR NURU: Okay.
    MS. DAWSON: And I'd like to offer --
    DIRECTOR NURU: Thank you, Ms. Dawson.
    I would like to invite Recology to have the
opportunity to cross-examine. Mr. Baker, would you like
to --
    MR. BAKER: Yes.
    We would like to get organized.
        EXAMINATION
BY MR. BAKER:
    Q. Good morning, Mr. Schultz.
    A. Good morning.
    Q. So you -- I didn't catch it, but you said you
personally have been working for R3 in this business for
how long?
A. I have been personally with R3 for two-and-a--half years now.
Q. But you've worked in this field before?
```

Page 652
A. I worked in the solid waste field since 2000 and have been involved in operations, implementation, outreach education, finance and reviews, rate setting and the like, including for local governments.
Q. And very briefly, tell us what you did in this field from 2000 up until a couple years ago when you joined R3.
A. I worked in operations for a private company for a year. I worked in smaller university-based operations for four years. I worked for the City of El Cerrito as a solid waste manager responsible for all things solid waste and recycling for eight years.
Q. So you've seen this business from several different angles and for a number of years?
A. Correct.
Q. Let me ask you a couple questions about your various tables, which are impressive in terms of breaking the information down. It's very helpful.

If you could look at Exhibit 88, and in particular the page that talks about the single-family homes. And you have in here dividing it up essentially by the trash container size; correct? 96, 64, 32, and 20?
A. Correct.
Q. Currently, what sort of price break do single-

Page 653

# Atkinson-Baker Court Reporters <br> www.depo.com 

-family homes that have $\mathbf{2 0}$-gallon trash containers as opposed to 32-gallon containers receive?
A. Based on the information here, it's around \$10
to $\$ 12, \$ 14$ dollars depending upon their service mix.
Q. And that's per month?
A. Yes.
Q. So that would be -- we're talking about a savings for the 20-gallon users of $\mathbf{\$ 1 2 0}$ to $\mathbf{\$ 1 5 0}$ dollars a year?
A. That sounds like an appropriate range.
Q. And that program that is the ability of
single-family homes to get 20-gallon trash as opposed to 32, that's been in effect for a number of years. Is that your understanding?
A. That is my understanding, though I don't know the exact dates of implementation.
Q. I think it goes back to 2001, but I'm not testifying; I've I got to check it and I may be wrong. But it goes back several years, would you agree with that?
A. Yes.
Q. So that means that those pioneers, so to speak, who have reduced the size of their trash containers have been enjoying a savings on the range of $\mathbf{\$ 1 2 0}$ to $\mathbf{\$ 1 5 0}$ dollars a year for a number of years;

Page 654

## correct?

A. In comparison to the 32-gallon equivalents, yes, that's correct.
Q. Now under the new proposed rates, as you pointed out, the 20-gallon users can keep their 20-gallon container and, in effect, have four extra gallons of trash capacity compared to those customers who go to 16; correct?
A. Correct.
Q. And by subscribing to that service, they will continue to get a price break over those customers who have 32-gallon trash containers; is that right?
A. Well, no one would have 32 anymore under this scenario.
Q. Well, if you -- a customer is entitled to keep their current containers, I think; isn't that right?
A. That was not my understanding.
Q. Okay. Well, on your chart you have prices for new monthly rates for folks who continue to have 32-gallon trash service; correct?
A. If you look in the "Notes" side column on the very right-hand side, these rates are based on the assumption of a 32 moving to a 16 overall.
Q. Okay. So let me just ask you to assume that you're wrong and that a customer who currently has Page 655

```
32 gallons of trash in a single-family home is going to
be allowed to keep that 32-gallon container.
A. Now that I'm recalling, yes. They can opt out of the program overall. But these rates here are shown at the opt-in basis, which would be moving from the 32 to the 16 with a bump to a 64-gallon recycling if they have a 32 currently.
Q. Right. But focusing again on our 22-gallon pioneers here, if they keep their 22-gallon container -pardon me. If they their 20-gallon container, they will continue to pay less than those customers who opt out keep that 32-gallon container?
A. Correct, yes.
Q. Let me ask you a couple of questions -actually, more than a couple -- of questions in a couple of areas that Ms. Dawson did not ask you about that are addressed in the \(\mathbf{R} 3\) report and also in the Staff Report. The first has to do with lease rates on capital assets.
You did an analysis of that; correct?
A. We reviewed the lease rates and the calculations from Recology to ensure reasonableness and consistency with policy.
Q. And as you know, there's been some discussion during these hearings of how to expense capital assets, whether lease financing is appropriate versus
```

Page 656
depreciation, and you address that question in your report as well, did you not?
A. Well, we understood ultimately from our discussions with Recology on that that the lease rate approach for these large capital asses was really the only methodology that they were able to use at this
point and not the depreciation approach that was originally included -- and that the rationale to us was appropriate.
Q. In other words, the rationale that Recology gave for using lease financing was appropriate in your opinion?
A. Correct.
Q. And you did that analysis -- I'm looking on page 49 of your report which is Exhibit 79, you did that analysis first of all with regard to capital assets such as trucks and other pieces of equipment?
A. Correct.
Q. And you noted there the 2006 Director's Report which made a thorough review at that time of lease financing; correct?
A. Correct.
Q. And that -- and you also note that in 2006 that the Director's Report indicated that for lease financing to pass muster, it had to satisfy certain

Page 657

# Atkinson-Baker Court Reporters <br> www.depo.com 

```
criteria; correct?
    A. Correct, including the non-application of
profit by Recology's intercompany leasing entity.
    Q. In other words, that the leasing entity would
not earn any profit?
    A. Correct.
    Q. And also that the leases would be at
competitive comparable market rates; correct?
    A. Correct, with benchmarking and certain
indicators within the marketplace.
    Q. And in your review, you determined that the
capital assets that were expensed through lease
financing in the application in 2017 met the criteria
that had been laid out by the Director in 2006?
    A. Yes. What was provided by Recology was an
indication of how the lease rates were calculated on a
month-to-month basis as well as how those projections of
leasing costs were established based on 24-month rolling
average of those lease rates -- prior 24-months rolling
average. So it's based on recent history and then
using that recent history to project what the leasing
rates were going to be for those leased assets in
the application.
```

    Q. Now as you know, the application also includes
    some large development projects, namely the West Wing,
Page 658
a new iMRF, and black bin processing. And so there's
been discussions to whether lease financing is
appropriate for the capital costs of those facilities as
opposed to depreciation expensing.
And what did you conclude on that score?
A. We conclude that we believe it's appropriate.
We certainly see that this is a cost that does require
financing. When discussing that with Recology staff,
we understood that in order to recover the cost that
they will incur on the financing, that they need to
treat it in a certain way that's not inconsistent with
what I've seen and what R3 has seen in other agencies.
And so to us, it makes sense now that we understand the
background for it. I'll leave it at that.
Q. Well, I can't really remember what I was going
to ask you next, but if I stand here long enough, I'll
think of it.
So why don't you keep your report open to the
pages, because I'm going jump back to that.
A. I'm trying to access it right now.
Q. But I want to also look at the Staff Report,
which is Exhibit 78. And in the Staff Report, there is
also a discussion of this question of lease financing
for the West Wing and the two Contingent Schedules.
And the first mention of that, I think, is on page 22 of
Page 659

```
the Staff Report. Do you have that?
    A. I do.
    Q. And in particular, if you look at the last
paragraph of the section on the West Wing, section 8.2,
it looks like the second sentence. It says:
            "Staff requests that Recology provide
    further justification demonstrating their need
    for this change in financial treatment and to
    certify that the leases are booked at market-
    -comparable rates with zero profit accruing to
    Recology's leasing company as was recommended
    in the 2006 Director's Report for Future Rate
    Applications."
    Now since the issuance of the Staff Report,
there's been a letter from the CFO of Recology that you
actually referred to in your report, I believe, which
has also been marked as an exhibit.
    So my question to you is from your review and
your knowledge of this area, you think that Recology has
provided sufficient justification demonstrating the need
for use of lease financing for the expensing of the
costs of these three capital projects? Or do you think
anything further needs to be provided by Recology?
    A. I believe that in terms of the discussions
we've had and the conversations that I've had with
```

            Page 660
    Recology staff, it's understandable and reasonable.
What I have not seen is something introduced
into the public record that justifies that more
explicitly. But in my opinion, based on the
conversations we've had and the understanding, I'm
comfortable with the approach that's being proposed
using the lease financing.
Q. So if we want to make sure that the public
record contains the same assurances that have satisfied
you, what more do you believe needs to get into the
public record?
A. I would recommend some sort of written
explanation detailing why it was changed from the
depreciation to the lease financing. That, to my
knowledge, hasn't really been introduced yet, but I
think that that's sort of an explanation detailing it
from Recology's point of view would be helpful in
further establishing the reasonableness.
Q. And from your review of this matter, what's
your understanding as to what it's been changed from
depreciation to lease financing?
A. Good question. And my understanding is that
it was, one, potentially inconsistent with some of
Recology's past practice to include it as depreciation
via this rate application and not as a lease financing

Page 661

# Atkinson-Baker Court Reporters <br> www.depo.com 

mechanism; and that two, from working with the folks
that are actually providing the leasing and the
financing, that Recology needed to be able to
demonstrate that they can recover the interest leasing
expense or the interest expense of those financed
capital investments. And that wasn't done through the
depreciation approach because depreciation is simply
recovering the principal component of those investments.
Q. And that's a pretty good summary of exactly
what your report states on page 53, Exhibit 79, in the
three bullet-points under $\mathbf{6 . 2 . 1 .}$ Would you agree?
A. I'll get that open to you.
Q. What page again?
Q. Page 53.
A. Yes, that is a summary of what I stated.
Q. And I believe this information may have come
from conversations that you had with folks at Recology,
in particular John Porter would be the person?
A. That is correct.
Q. But Mr. Porter testified to that as well
during the early hearings. I thought you were there.
Maybe you didn't hear it.
A. I was. Even during the testimony it remained
a bit unclear to us and the staff. But since that
testimony and via the further conversations, we gained
Page 662
a further understanding leading to what we've written here.
Q. So to make sure we've tied it all up in a bow,
from your standpoint, if we go to get Mr. Porter up
there on the stand again and explain this in further
detail, and then to the extent you have any questions,
Ms. Dawson, anybody has any questions, they can ask them then and make sure we got everything on table?
A. That sound appropriate to me.
Q. Very good, thank you.

So let me -- there's actually one other area
I wanted to ask you about which Ms. Dawson did not ask
you about and that has to do with the recommendation both of R3 and the staff, that Recology not earn O.R. on composting tip fees. And I think you know what Recology's argument is on that; you stated it -summarized it in your report, but let's dig into it just a little bit.

Would you agree with me that in business, a higher profit margin is sometimes appropriate when we're talking about a venture which has risks to it?
A. You know, I'm not a businesses analyst. And I think that the statement makes sense, but that's not something I generally have firm opinion about.
Q. Okay. But based on your general knowledge and
experience of businesses and the work that you've done, would you agree it's sometimes the case that to motivate businesses to invest in something that's not certain, a higher potential profit is sometimes offered as an inducement?
A. We do see that in the arrangements and agreements and contractual relationships that we review or often help broker. Yes, we do see applications like that generally with respect to increasing the diversion programs.
Q. And so as you know, Recology draws the contrast between landfill disposal on the one hand and composting on the other hand; so let's just talk about that a little bit. Because you do have experience in those areas --
A. Correct.
Q. -- in particular, to see what you think about that. Would you agree from a regulatory standpoint that landfill disposal is a more mature, more settled area than composting?
A. Yes, I would agree with that.
Q. And would you also agree that that's true with regard to operational techniques, namely that landfill operations are more developed, more settled than composting, which is a bit newer?
A. I would reframe it a bit and say that landfill technologies are largely similar to what they have been in the past and there's been moderate changes. But yes, it is true that the composting industry at this point in time is undergoing some change in response to changes in demand as well as changes in the regulatory sphere.
Q. And I liked your reframing of it.

Landfilling is you dig a hole and put garbage in it, put something on top; and composting's ab bit more complicated.
A. It's been developing and changing over time.

It has been becoming more mature; that's correct.
Q. And I don't know whether your work included this, but since the 2013 rate hearings here in San Francisco, there have been some significant regulatory changes that have occurred in the composting area that have increased operating cost. Is that your understanding?
A. That is our understanding.
Q. And are you aware of any similar changes in the landfill area?
A. No, I am not.
Q. And would you also agree that it's possible that in the near future we could see more regulatory changes in the composting area that could also add

Page 665

# Atkinson-Baker Court Reporters <br> www.depo.com 

```
costs?
    A. I think it's possible. What I'm aware of at
this point is that many of the regulatory changes that
have been pushed by regulatory agencies are currently
being adjusted and adopted to; so I can't forecast what
the additional ones might be, but we know that there are
some that are being responded to now by composting
operations.
    Q. And is it also true that some innovation is
occurring in the processing of composting? People
trying new things; some are working, some aren't?
    A. True.
    Q. So this rate application, as you understand,
covers what period of time?
    A. From rate year 2018 through '21/'22.
    Q. And if regulatory changes, if processing
changes, if processing experiments fail, et cetera, and
Recology starts to lose money in the composting area,
who bears that risk?
    A. Recology does.
    Q. And because the composting tip fee is being
established as part of this rate application to apply
going forward subject to COLA; correct?
    A. Correct. Our understanding, however, also is
that that tip fee does include a profit component for
```

    Page 666
    the Recology affiliate that handles the composting
operations.
Q. Right. And that's why we're having this
discussion.
A. Right.
Q. So I guess the question is, going back to our
original premise here, which is that greater risks
sometimes warrants a larger profit margin because of the
risk that actually money will be lost and you won't be
making any profit at all.
Why is that not appropriate in this situation?
In other words, there is a profit component at the
composting subsidiary level. We're talking about an
O.R. at the collection rate level, the effect it means
for the affiliated companies a larger profit margin on
composting than others.
Why is that not appropriate given the fact
that the composting provides unique challenges and
unique risks as compared to the other operations?
A. Yes. Our viewpoint on this is that having
profit handled in that way, one, can open the door for
some lack of clarity in the future; two, does create
additional rewards if some of the changes that we
discussed don't come to pass. Additionally, our
viewpoint is that the profit at the composting operation
that's including the per-tip fee really should be established in order to cover that cost and that restriction.

What we see in other agencies and we see references to in prior Director's Reports is that these outside handling of materials, when those are subject to profit of their own including the costs paid by the company, in our opinion, aren't really appropriate for profit at the collection company level. For the reasons I explained, we believe it's more appropriate to have the profit at the composting operation cover that risk if that risk is really there, and we don't see that it's appropriate to have the profit on something that already includes a profit component.

And that's an opinion and a policy position that R3 has in our engagements with clients and that's consistent with what we recommended in other jurisdictions.
Q. You recognize, though, that the collection companies -- Golden Gate, Sunset, and also Recology San Francisco, the processing company -- are separate entities from the Hay Road and Blossom Valley composters; correct?
A. Yes, correct.
Q. And so the Hay Road Organics and Blossom

Page 668

Valley can charge the collection companies and Recology
San Francisco whatever they want; correct? I mean, these proceedings are not going to contain that?
A. Well, and I don't understand and have the knowledge of how Recology would negotiate those rates between those different entities. One thing I am aware of, though, that if for some reason -- and this is consistent with one of the alternatives that have been discussed previously with respect to the Contingent Schedules -- is that if Recology does see an undue increase in that cost component of their operation, there is the opportunity to come back and adjust that through a future rate application process which would be anticipated in four or five years, based on the current schedule that the rate applications have been considered on.
Q. But in the meantime, Recology bears the risk of unpredictability?
A. And of managing that with their affiliates.
Q. Have you considered the possibility of the collection companies and Recology San Francisco still earning an O.R. to compensate for the increased risk but having it be a reduced $O$.R. as compared to the standard that applies to the entire application?
A. That's a good question. We haven't

Page 669

# Atkinson-Baker Court Reporters <br> www.depo.com 

```
specifically evaluated it, but I think that such a
proposal would get at some of the concerns that we would
have about having a profit at the current O.R. and
profit on the composting per-tip fee.
    Q. That it would do what?
    A. That it would address some of the concerns we
have depending upon what the proposal was.
    Q. It would address some of the concerns you have
and some of the concerns that Recology has?
    A. It sounds like it might.
    MR. BAKER: I don't have anything further.
    Thank you.
    DIRECTOR NURU:Thank you.
    Does the Ratepayer want to cross-examine?
        EXAMINATION
BY MS. DILGER
    Q. Good morning. I just a couple of questions.
        Did you explore any rate structures that had a
had at an ultimate 25% or any level where regardless of
service, there is a cap for how high it could be
increased?
    A. Within the structures of the rate model and
the details provided by Recology, we wanted to work
within the current structure. So no, we did not explore
something that had an applied cap. We do believe that
```

    Page 670
    that's something that could be explored, but I think
that it would fundamentally change the structure that is
currently in place.
Q. How about for consumers or ratepayers that may
see their rates go down? Did you consider not letting
be part of the equation?
A. It's been discussed with staff. I think from
our perspective, that it is an evening. When you adjust
a rate structure like as being proposed here, you do
have changes throughout the entire system. Some folks
go up and some folks go down. We did discuss that.
I don't methodology that would work to integrate it
specifically in the rate structure and rate format that
is currently utilized by Recology.
Q. Thank you. Of the people whose rates would
go down, do you an idea of what type of ratepayer or
consumer looks like, what their habits are?
A. I don't know about the habits. I know about
their container sizes, which tells me something about
their habits. I mean, generally these are larger trash
landfill generators and often also folks who have
multiple containers or other sizes of containers for
recycling and organics other than the minimum.
Q. So higher waste producers are technically
going to get a lower rate under this rate structure?
A. Generally, yes.
Q. Okay. You mentioned that there would be a
mandatory switch from to 96-gallon trash bin down to 64.
Has there been any considerations to keep the $\mathbf{9 6}$-gallon
bin?
A. That has not been a question that I've been
asked. It's a very small number of customers in
comparison to the entire service area. It's
surprisingly small, in fact.
Q. What about for multi-units? Those buildings
we've talked so much about with two to five units,
those who share trash service.
A. What's the specific question regarding multi-units?
Q. I guess I'll just move to multi-units in general.
A. Okay.
Q. Looking at Item 88 -- you can go back and
forth between comparison. But from what I'm looking at, it seems very apples-to-oranges because the price for this service of, for example, 64/64/32-gallon service for a four-unit building will go up to $\$ 116.53$, whereas if you look at that for single unit for a single-family residence, that would actually go down to $\$ \mathbf{5 6 . 5 4}$.

Would you say that single-family residences Page 672

## are getting a better deal under this new rate structure?

A. Not necessarily. What is happening here is
that in a multi-unit building, they're both paying for the cost of the collection services in the bins that you put your materials in and put out to the street, but you're also paying for the cost of the other services that you receive benefits from.

The reason that the multi-units go up in these categories is because the per-unit charge is going up to account for more of the fixed cost. That is directly related to their participation and ability to benefit from other programs -- HHW programs, the benefits that are received through the BIC and AMC programs. So it's more directly aligning that cost with the rates they pay with the cost of providing these other service, not just the bins that are placed out at the curb.
Q. So for a multi-unit building, their only way to mitigate an increased charge is to reduce their waste?
A. To reduce their waste or better utilize the capacity that they have.

MS. DILGER: Okay. So it's probably not a question for you, but hopefully later on we can address whose responsibility it is to reduce their waste and how to do that education outreach.

# Atkinson-Baker Court Reporters <br> www.depo.com 

```
    That's all I have for now.
    THE WITNESS: Thank you.
    DIRECTOR NURU: Okay. I think we will go
to --
    Did you want to add something?
    MR. HALEY: Yeah.
    DIRECTOR NURU: Robert Haley from Department
of the Environment.
            EXAMINATION
BY MR. HALEY:
    Q. Yes, I just have one clarification for
Mr. Schultz.
            Earlier I believe you indicated that the two-
-to-five unit residential customers could be eligible
for a $5 dollar credit; is that right?
    A. That's my understanding, based on the math in
the application for the T-20 subscribers.
    Q. Just to clarify, my understanding looking at
the applications, which is Exhibit 1A, RSS/RGG Schedule
B3, that $5 dollar credit is just being proposed for the
20-gallon customers?
    A. That's my indication.
        20-gallon customers in any unit combination.
    Q. And it's my understanding that only single-
-family are eligible for 20-gallon bins and currently
        Page 674
have them?
    A. Okay. Well, we might need to look at that a
little bit. In the number that's included in the rate
application, unless it's been revised, is equal to the
number of subscribes to T-20 at any service level, based
on what I reviewed. Or any unit combination. We can --
I confirm that with Recology.
    MR. HALEY: Okay, thank you.
        EXAMINATION
BY MR. BRUEN:
    Q. Mr. Schultz, good morning. My name's
Tom Bruen and I'm acting as outside counsel for the City
in this rate review hearing. I wanted to follow up on
some of your answers to Mr. Baker's questions on the
compost facility operating ratio subject.
    To begin with, Mr. Baker asked a conceptual
question of whether or not allowing an investor in a
high-risk business a higher profit or return on capital
was appropriate in a high-risk business, and I think you
generally answered in the affirmative.
    My question is do you know if any of the three
Recology subsidiaries that are involved in this rate
review proceeding are investors in the Hay Road or
Blossom Valley facilities?
    A. I'm not familiar with the investor
```

```
relationships in any of their subsidiaries.
    Q. But you have seen the audited financial
statements of the three Recology companies involved in
this proceeding?
    A. We have them, yes.
    Q. And those financial statements, so far as you
know, don't show an investment in either of those
composting facilities by the three Recology
subsidiaries?
    A. We have not reviewed them for that level of
detail. What we've reviewed them for is consistency and
expense and revenue calculations as they relate to
what's included in the rate proposal.
    Q. Fair enough. So sitting here today, you're
not aware that any of the Recology subsidiaries involved
in this rate proceeding face any risk of loss of
investment in the two composting facilities if, for some
reason, there's a regulatory change or something else
that affects the value of that investment?
    A. I don't information either way on that one.
    Q. All right. Have you received financial
statements for the two Recology facilities that handle
organics processing?
A. No.
Q. Do you know how much profit they make?
```

Page 676
A. No.
Q. So when you were asked by Mr. Baker if it would be appropriate to consider giving the collection companies who may not be investing that business a higher operating ratio to account for the risk of those operations, you don't know to what extent the profit of those operations current make already account for that risk.
A. Correct; we do not.
Q. Now, Mr. Baker asked about a couple of things that distinguish organics facilities from landfills, and there were two factors that were discussed. One was demand and one was future regulatory change.

With respect to future regulatory change, has Recology presented you with any information indicating that there is a probability of a significant regulatory change affecting its organics operations that has not yet occurred but will occur in the future?
A. There's a discussion of it within the rate application and some concerns about how future regulations might impact it. We don't have anything specific. We do see, however, that their actual per-ton costs have increased in response to regulatory concerns in recent years.
Q. And in fact the biggest cost driver in this

Page 677

# Atkinson-Baker Court Reporters <br> www.depo.com 

```
rate proceeding is a 28% cost increase reflecting
increases in the gate rates charged by those composting
facilities?
    A. No, that's not quite accurate.
    Q. I'm sorry, I'm looking at the wrong --
it's blue. It's the 6%?
    A. It's a smaller piece of the pie. It's the 6%.
    Q. Okay. And that 6% reflects what, exactly?
    A. The change in the per-ton fee.
    Q. And the change in the per-ton reflects
increases in regulatory cost affecting those operations?
    A. As it's been represented by Recology, yes.
    Q. All right, okay. Now with respect to the
one -- the other area of risk, which is demand, is it
your experience that demand for landfills has been
decreasing in recent years?
    A. It's remaining relatively static
    Q. And what about the demand for composting
facilities?
    A. Increasing significantly in response to state
legislative change as well as local programatic
requirements.
    Q. And from the standpoint of a business,
is increasing demand a downside or an upside?
    A. Depends on how you look at it. With respect
```

Page 678
to composting facilities, there's a downside in that
there is actually a risk of running out of regiona
capacity to process the organics that are sought for
processing by all of the municipalities and
jurisdictions around. So the downside there is that
there is a risk of actually not having a home for some
of those materials. The upside, of course, is that
they're fully maximized in terms of their utilization of
those facilities.
Q. And generally when a demand goes up for a
products, the company that produces the product is in a
position to raise its prices?
A. Correct.
MR. BRUEN: That's all I have.
Thank you.
DIRECTOR NURU: Okay. Any other
cross-examination? Mr. Baker, it looks like you have
some questions.
RE-EXAMINATION
BY MR. BAKER
Q. I just wanted to follow up, if I could,
on questions Mr. Bruen asked you.
Is it your understanding of the structure of
the rate application that the composting facilities
Hay Road and Blossom Valley charge a tip fee to Recology
Page 679

San Francisco?
A. Correct.
Q. And Recology San Francisco has incorporated that tip fee as an expense as part of its overall application?
A. Correct.
Q. So if Hay Road or Blossom Valley increase
their tip fee next year or the year after, who has to pay that?
A. Recology San Francisco.
Q. And you haven't seen anything that would restrain Recology Hay Road or Recology Blossom Valley from increasing their tip fees?
A. Again, I don't know the specific contractual or agreement relationships between RSF and those two entities; so I don't know one way or the other.
Q. But you haven't seen anything that indicates that they're restrained?
A. No.
Q. So if Recology Hay Road or Recology Blossom Valley were to increase the tip fee and Recology San Francisco paid it, could Recology San Francisco just automatically pass that on to the ratepayers?
A. No, it could not automatically be passed on.
Q. We'd have to rate for another rate hearing or Page 680

```
some other procedure; correct?
    A. Or potentially negotiate those costs with the
partners to keep them within around that is acceptable
to Recology up to the next detailed rate review.
    Q. So given those parameters, would you agree
that Recology San Francisco does bear a risk --
    A. Yes.
    Q. -- that changes could occur at the composting
operations which would increase Recology San Francisco's
costs and Recology San Francisco would not be able to
pass on those costs?
    A. There is a risk to that, yes.
    Q. And the other thing I wanted to ask you about,
Mr. Bruen asked you about two areas that he said I asked
you about. Maybe I did, but I didn't mean to ask it
that way, but I just wanted to clarify. I was asking
you about risk of regulatory changes, and secondly, the
risk of additional costs due to technological changes,
operation changes, innovation.
    Did you understand me to be talking about two
different areas: one, regulatory changes; and the
second, possible operating changes that could give rise
to an increased cost?
    A. I could say I understand you now on that, yes.
    Q. Well, I wasn't clear. Because I didn't intend
```

                                    Page 681
    
# Atkinson-Baker Court Reporters <br> www.depo.com 

```
to talk about demand, but I was talking about this other
area so I just wanted to clarify that.
    MR. BAKER: Thank you.
    DIRECTOR NURU: Okay. Any other
cross-examination?
    Okay. Maybe at this time we should take a
ten-minute break. So can everybody can be back here at
9:55 promptly.
    (Off the record at 9:42 a.m.)
    (On the record at 9:55 a.m.)
    DIRECTOR NURU: At this time I think I will
ask Mr. Baker if he would like to begin Recology's
additional testimony on recommendations of the
Staff Report
    MR. BAKER: Yes, Mr. Nuru. We're going to
have John Porter and Mark Arsenault come up together
again, if that's okay.
    DIRECTOR NURU: Okay. If both John and Mark
will take the stand.
            JOHN PORTER & MARK ARSENAULT,
            having previously been duly sworn,
    were examined and testified as follows:
                EXAMINATION
BY MR. BAKER:
    Q. All right. Gentlemen, you're still --
```

        Page 682
    DIRECTOR NURU: Mr. Baker, you may continue. MR. BAKER: Before we start, I'd like to offer an exhibit. A Golden Gate and Sunset customer communication tracking report for January 1, 2016, through December 31, 2016. This will be --

MS. DAWSON: Exhibit 91.
MR. BAKER: 91, thank you.
BY MR. BAKER:
Q. Mr. Porter, can you just describe generally what this is.

MS. DAWSON: Mr. Baker, before we go there I want to officially enter it into the record but I don't have it yet. And I don't have our attorney here present at the moment, so I'm acting on his behalf.

So Exhibit 91, entitled "Golden Gate
Disposal \& Recycling Company and Sunset Scavenger Company Customer Communications Tracking Report, January through December 2016."
(Exhibit 91, "Customer Communication
Tracking Report [Recology]," was admitted into evidence.)
MR. BAKER: Thank you. Which is Exhibit 91?
MS. DAWSON: Yes.
THE WITNESS: (PORTER) Yes. And to answer your question, Mr. Baker, this Customer Communication Page 683

## Tracking Report is a reporting requirement as part of a past rate process. This particular report was not yet prepared and not due when the final rate application was submitted, and so we're now submitting it into evidence as it's been completed and submitted to the City subsequent to the final application. BY MR. BAKER: <br> Q. So this is a form of report that is regularly submitted to the City on an annual basis? <br> A. (PORTER) Correct. And it tracks the reasons why we are getting contacted by our customers, and it takes into account various forms of communication whether it be either e-mail or calls. <br> Q. Thank you. Do you have the Staff Report there? <br> A. I do. <br> Q. If you could turn to page 15 of the Staff Report, which is Exhibit 78. <br> A. Okay. <br> Q. And that in particular talks about Recology's assumption in its application regarding loss of revenue due to apartment customers downsizing their service. <br> A. Yes. <br> Q. And the Staff states that the percentage that Recology used was too high and the Staff recommends a Page 684

## smaller percentage of proposed migration. <br> A. Are we talking about migration or the apartment? Sorry. <br> Q. Migration. <br> A. Okay, talking about the migration. Yes. <br> Q. So can you give us your thoughts on that point?

A. Sure. Subsequent to the Staff Report being completed, we did an analysis on apartment migration, particularly around how much change would be required in order for us to meet our 1\% migration goals. And frankly, the findings were fascinating.

If we use a targeted approach on the largest apartment buildings within the city of San Francisco, we would need to convert only 348 buildings to diversion rates ranging from 65\% to 75\%. So moving some of the largest buildings in San Francisco, 348 of them to 65\% to $75 \%$ diversion depending on their existing diversion, would result in over a 4.3\% migration over the three-year term of the rate, which would exceed the kind of $3 \%$, if you will, $1 \%$ per year over a three-year assumed term of the rate application that's included in the final application.
Q. So to be sure we have all those numbers straight, the final application assumes a migration of Page 685

Atkinson-Baker Court Reporters<br>www.depo.com

```
1% per year?
    A. Correct.
    Q. For a total of 3% over three years?
    A. Over -- yeah, the assumed three-year term,
yes.
    Q. And "migration," again, means what?
    A. It is when a customer takes one gallon of
trash services and moves that to either recycling or
composting services.
    Q. And the analysis that you did indicates that
if you could get 348 of the largest buildings to
increase their recycling up to 65% to 75%, that you
could increase that total migration from 3% over three
years to 4.3%?
    A. Right. In order to achieve our 3% goal, if
you will, that we included in the application, yeah,
we would touch }348\mathrm{ customers that would end up resulting
in a 4.3% migration.
    Q. So when you talk about getting these buildings
to recycle at a clip of 65% to 75%, can you give us some
idea of that population of buildings is doing now?
    A. It runs the gamut. In general, all of the
customers, you know, they range from 10% to 15%
currently. And so it kind of runs the 10%-to-15%
band where they live, so we're asking them in some
```

Page 686
cases to increase significantly to $65 \%$ which would be approximately equal-size service for all streams of service.

And then for those that are already doing a
better job, increasing that a little bit more. In the $51 \%$-or-greater range, we're asking them to step it up to 75\% essentially
Q. So can either of you give us any examples of buildings within the city where there has been some outreach and some success in increasing recycling that gives you a level of confidence that you could get other large buildings to comply as well?
A. (ARSENAULT) I'll take that one.

And we do have some examples, and they exist primarily around large complexes where either one of two things -- well, really a couple of criteria are
important.
One is that there is someone who is really motivated and a champion of the building; so that's very important in this transition process.

Second is that there is a focused effort for outreach and education for the buildings signage.

And then third and probably the most important is really a shift and a complete change in the way that trash is handled. The proposal that we have on the
> table does contemplate the kind of outreach I'm describing as well as the personnel to provide that. What we have seen were these buildings that have been successful and achieved these results as really one of two primary changes that have been made.

> First and foremost, which I think is the easiest method, that is to change way chutes -- most of these buildings have chutes, typically a single chute -and they're just traditionally used for trash. Because of the way the waste stream has changed, really that is a very small volume of what should be going down that chute; the larger volume is by far the recyclables.

> So where we've seen success is where the chutes have been -- the signage has gone out, the education has gone to the building, and the residents in that building are then putting their recyclables down the chute and they are carrying their trash down to the parking area where many of the buildings have their recycling, both the trash and the organics. So that in itself is probably the largest opportunity for success in this area.

> The other area is where some of the buildings have actually placed most of the chutes or most of the services by elevators where they've actually created little stations for the residents, and then had

Page 688
janitorial staff or other staff go periodically throughout the day to the levels of the floors collecting the material and bringing it down.

That's done a number of different ways, but again, it involves a lot of effort in terms of outreach, signage, containers, making it convenient. It's all about convenience and space. The buildings are just not designed for what we need to do, but it's not difficult to change them as long as the residents and the property owner -- and like I say, typically the property manager is willing to work with us to do that. We do have examples and I know SFE also has worked with some of these same buildings and seen that kind of success.

So really, this is about and I think we described it some time ago we have experienced this $1 \%$ migration historically over the past several years with our commercial customers where that focus has been made. The apartments is where we really want to target this. We've experienced with really not this kind of focus a 2/10ths of a percent rather than one full percent. So as John described, there's like 8,000 apartment complexes. But in looking at the data, looking at the opportunity, the biggest opportunity is in the larger complexes and over a three-year period, we really have to successfully convert just over 110 or 115 of them,

Page 689

Atkinson-Baker Court Reporters<br>www.depo.com

```
which I think is very much achievable.
Q. I think we have some photos here of some of the successful efforts that have started in some of these buildings. Maybe we'll show that and you can identify the building and give them due credit.
A. (PORTER) It's also probably worth noting while you've handing those out and it's been mentioned several times previously, but for those that haven't been at all the hearings, we do have a program contemplated in the application specifically related to apartment outreach efforts to institute programs similar to these examples that we are handing out now. MR. PRADHAN: These two photographs. They will be admitted as Exhibit 92. MR. BAKER: Can we make them 92 and 93? MR. PRADHAN: Sure. 92 and -(Exhibit 92, "Recycling Chute photograph [Recology]," was admitted into evidence.) (Exhibit 93, "Apartment Recycling Station photograph [Recology]," was admitted into evidence.)
```

```
BY MR. BAKER:
```

BY MR. BAKER:
Q. Let me start with -- if you don't mind putting the overhead up for me -- let's do Exhibit 92, the recycling chute.

```

Page 690

\section*{A. (ARSENAULT) Yeah, this is building} 200 Brannan Street. And this is actually newer chute, if you will. A lot of the older buildings just have a door, you pull the handle, and it slams shut behind you. But clearly this chute has been repurposed for recycling only, and it's a really good example of how simple it can be at the front-end to make this change.

And then obviously where the chute goes to, which is typically down in the garage parking area, the property manager has to work with us to reconfigure the bins because there will be a much more significant volume of material that will go into those containers that are down below; so they have to be rotated more frequently. But really, that is literally the only change that will have a significant impact.
Q. And then the other photo we have.
A. This one's more interesting and more creative.
Q. Just going to interrupt you just one second.

So we're marking as Exhibit 93 a photo of a green bin, a blue bin, and a cabinet with some baskets on the right that you're going to tell us what they are.
A. Yeah, Cathedral Hill Apartments.

These are stations throughout every floor.
You see barely see the elevator buttons on the right-
-hand side, so they're clearly near the elevator where
Page 691
most folks would go whether they're coming in or out of the building. And so the containers are placed right there convenient for them, and obviously they've got the compostables, the recyclables, and the other is really a great effort which is the household hazardous materials we don't want in either container. And you can see -- I don't know if you can see the picture there, but those are batteries. And then the residents actually carry down their trash.

So again, a complete reversal of the traditional method of moving material, but I think it speaks to the fact that now most of the material is recyclable or compostable, so we just need to convert the way it's managed at these buildings.
Q. This may be a question better directed to

Mr. Giusti -- I don't know. But have you gotten feedback from property managers and/or tenants at these buildings where these two changes have been made to see how they're received?
A. Yes. It's been extraordinarily positive for the tenants. And I will say for the property managers, under the proposal, it will be very popular as well because as you know, we are proposing to move the threshold for the discounts from \(10 \%\) floor to \(25 \%\) floor; so they will be highly motivated from an economic

Page 692
```

perspective to see these changes come about.
Q. So when Mr. Porter had mentioned an analysis
of 348 properties where changes could be made, I know
you haven't visited all }348\mathrm{ properties, but do you have
a sense of how many of those have not yet experienced
the sorts of changes that are depicted in these two
photos?
A. I do not, but I could hazard a guess that by
and large, they have not gone to these types of changes.
So where you see a 50% diversion, clearly they're making
an internal effort. But those efforts are difficult to
sustain unless you change the setup of the service, and
that's really critical.
Q. And part of the application is for funding for
outreach to get the apartment managers and the tenants
to buy into this new sort of behavior; correct?
A. Correct.
Q. So Mr. Porter, does this analysis make you
more confident in the 1% migration, less confident, or
no change?
A. I wish we had done this before we used the 1%
migration assumption because I would have argued that we
should increase it, but c'est la vie. We'll work with
what we got. But yeah, I feel very confident knowing
the efforts. And I think using the targeted approach

```

\author{
Atkinson-Baker Court Reporters \\ www.depo.com
}
on the largest building would see the most dramatic of impacts.
Q. Now continuing on page 15 of the Staff Report, Exhibit 78, there's discussion there of the other element, namely the projection of the number of new apartment customers over a year period of 25. And we heard Mr. Drew testify on this subject last week about the Staff's indication that \(\mathbf{5 0}\) was a more reasonable projection rather than 25. And I think Mr. Drew also indicated that the adjustment that the Staff Report recommended in revenue did not account for the expenses of servicing additional customers; is that right?
A. I believe he wasn't certain at that time.
Q. What can you tell us about that?
A. Well, I can tell you that, yeah, I mean, it would not have been included -- the expenses associated with collection and disposal and processing would not have been included and just layering on an additional 25 apartment accounts.

It is probably worth clarifying, though, that it's difficult to look at customer groups in isolation, especially in the apartment and commercial sectors. Because what customers are classified as commercial versus apartment varies on a couple factors, one on the size of the building. So if it's greater than

Page 694

600 rooms, then it would be considered a commercial building. Or if they have service in excess of 3 yards, a container service in excess of 3 yards, then it also would be considered a commercial building. And so looking at the support provided, it's difficult to tell whether or not these customers were included in our assumed commercial accounts.

And then to answer your question more specifically, in my opinion, if you were to layer the cost associated with these additional 25 buildings, you know, it would approximate to some degree the anticipated additional revenue, I think, that the delta would be -- or the difference between those two would be relatively inconsequential relative to the size of this application.
Q. So to make sure I understand what you just said, the Staff Report projected that 50 new apartment customers would come online rather than Recology's projection of 25; correct?
A. Yes.
Q. So that's an additional 25 customers, and the Staff Report said that that would translate into additional revenue of \(\mathbf{\$ 1 5 6 , 0 7 2}\) dollars; correct?
A. That's correct.
Q. And to the extent there might be additional
```

revenue that would reduce the revenue need from
residential ratepayers and therefore impact the rate;
correct?
A. Correct. That is the proposal.
Q. So let's assume that Mr. Drew is right and
that there are going to be 50 new apartment customers
instead of 25. Your point is that you got to look at
not only revenue, but also the expense of servicing
those additional customers; correct?
A. Yes.
Q. And what would be the additional expense?
Not in terms of -- I know you haven't specifically
quantified it, but what are the nature of additional
expenses that are required if you have 25 additional
apartment buildings?
A. Well if you have additional apartment
buildings, you require additional capacity in your
collection trucks, so therefore you may result in
additional route or additional route hours. So you've
got capital costs equipment, labor hours, benefits,
overhead, the administrative costs. Then you've got
processing costs, whether it be compostables or
recyclables, disposal costs. And then lastly, if these
are apartment customers, they qualify for Bulky Item
Collection.

```

Page 696

\section*{Q. The what?}
A. Bulky Item Recycling, excuse me.

And so there's a multitude of costs that would be associated with these additional customers that would not be contemplated by just adding additional revenue to the rate model.
Q. Have you quantified what the additional cost would be for 25 additional apartment customers?
A. I have not done it in a rigorous analysis.

You would need to know the locations of the building, the capacity of the trucks that service these areas, the size of the streams, et cetera, to do a really robust analysis.

But if you want to use high math, you know, 25 additional customers, 3 streams of service, that's 75 additional pickups in one day. I think a front--loader route, which is likely the service offering for the buildings of these size, can do about 60; so we're talking about one route day when routes are roughly \(\$ 500,000\) dollars. So we're talking about, at a minimum, \(\$ 100,000\) dollars of just collection costs, and then you have disposal and then the other administrative and overhead costs that we're talking about.
Q. So I think you said this. So your conclusion was that 25 additional apartment customers would

Page 697

\author{
Atkinson-Baker Court Reporters \\ www.depo.com
}
```

generate additional revenue, that revenue would be
offset by the cost required to service those customers?
A. Correct.
Q. Let's turn the Staff Report on page 17.
That has a section discovering the CPI inflation factor?
A. Yes.
Q. Could you address that, please.
A. Sure. You know, I've worked closely with R3
and their staff on this particular matter. I think
we're talking a little bit about what's your favorite
flavor of ice cream versus a practical matter of
determining what is the most appropriate way of
measuring inflation. I don't disagree that this is a
reasonable way of approximating inflation. So I also,
you know, whether what methodology is preferable is
subject to opinion, but I don't think that this is
unreasonable.
So my only ask that if they were to move
forward with this approach in their Director's Report
recommendation is that that approach is consistent with
the application as it is with the COLA calculation in
subsequent years so that we use a consistent methodology
moving forward.
Q. Okay. I'm going to wait a minute because the
people who may want to hear this are talking amongst
Page 698

```
themselves. But please, take whatever time you need.
    So when you say that the recommended
methodology in the Staff Report, which yields a 2.67\%
inflation factor versus 3\%, would be okay with you so
long as it's applied consistently. What do you mean by
that, "applied consistently"?
A. Currently we're using a year-over-year methodology for our COLA calculation, and we're not using this rolling average method that's proposed. And so my ask would just be that if we use this methodology for the inflation factor in the application, that we use that same methodology in the COLA calculation.
Q. Namely a rolling year-over-year?
A. A rolling average, yes.

MR. BAKER: There are some other issues that we think we'll have Mr. Porter and Mr. Arsenault address which, as I understand it, are going to be addressed by Staff next week rather than this week. I'm thinking about the Bulky Items, for example, and the Abandoned Materials and the like.

MS. DAWSON: Mr. Baker, I do actually have some data on that. It probably would at least be worth us starting to have those conversations this week as we'll have more time this hearing period than we will in
the next one. That being said, I think we won't conclude until the next week.

MR. BAKER: Well, I'll yield to you and we'll see what we can cover this week and then cover the rest next week. Thank you.

MS. DAWSON: I do actually have some cross-examination questions on the testimony. EXAMINATION
BY MS. DAWSON:
Q. So I'd like to understand -- so as noted by Mr. Baker in the Staff Report, when we talked about migration and the corresponding revenue loss, we did point out in a prior period since the last rate application which was in 2013, there's really only been \(0.2 \%\)-- so \(2 / 10\) ths of \(1 \%\)-- change in decline in apartment revenue.

So I'd really like to understand maybe a little more fully why you're convinced it's so different this time, and in particular I note something that Mark Arsenault said in his testimony which is that it requires focused effort, some capital investment potentially, and a building champion, which may be harder to find than we would hope. And so I'd just like to hear a little bit more on that.
A. (PORTER) One thing to clarify is that \(0.2 \%\) is Page 700
per year, not an aggregate of the term. Just want to clarify.
Q. Yes. But still, relatively small?
A. Sure. Just making sure people don't think it was per year.
Q. Thank you for that clarification.
A. (ARSENAULT) Yes, certainly. I'd be happy to
expand. There is definitely more of a challenge in achieving diversion from the apartments, but in getting to zero waste, it's the opportunity. It's the frontier. And so I think we need to take this challenge more seriously. We're prepared to do it. The application contemplates that kind of outreach. And I think the rate structure contemplates that change by creating the opportunity for the property owner, which hasn't been so robust in the past.

So I think you've got all three of those elements coming together. Finding the champion of the building, that is more difficult; there's no question about that. But we know how to get that job done, and we just need to put the focus to it -- put the wood to it, really.
Q. Okay. I have another follow-up question that relates a bit to Mr. Porter's testimony in reflection of Mr. Drew's information on the new number of apartments.

Page 701

\author{
Atkinson-Baker Court Reporters \\ www.depo.com
}
```

Now, in earlier testimony and in your own studies, you've stated that you have a large proportion of fixed to variables costs which is reflected in the rate structure; is that correct?
A. (PORTER) correct.
Q. But what I also heard you saying, in citing the reasons for there being rising expenses, were some of those items that are actually fixed costs. So while I understand that there will be some increase and some potential variable service, I think that there's two arguments that could be made against that point: one, just that you do have a large amount of fixed costs and some excess capacity built into the system.
In earlier testimony, we've heard discussions about how changing the split trucks and increasing routes is going to actually add capacity that you don't currently have in the system; so if you do end up with more customers, some portion of those new customers will benefit from that increased capacity -- understanding there are limits to that.
Also for things like Household Hazardous Waste, Bulky Item Recycling, those are largely fixed--cost item programs. And while they have been seeing increased demand over the large customer base, it seems to me that it's likely that the corresponding expense

```

Page 702

\section*{increase is less than the revenue, and I'd like you to} address that.
A. As I mentioned, the first caveat I made was this would require a robust analysis. And the expansion of routes and capacity, I believe, is primarily related to side-load collection. And if these are large apartment buildings, it would probably be front-load collection trucks. And so in order to really fully understand what the cost of impacts would be, you need to do a robust analysis surrounding where these buildings are located, what routes would they be on, how much capacity would be in the trucks that would service these buildings, and the types of collection that they would require.

So you know, I understand your concern, I think it's facts-and-circumstances dependent, and I'd also just like to highlight the first point that I made which is you can't look at apartment customers in isolation without understanding their service level or size. And so if it's more than 600 rooms or their size of collection is greater than three yards, you're going to have a commercial-classified customer. So you know, between those two, it kind of makes it a difficult question to answer.

\section*{Q. So I would ask that Recology then -- so in}
```

your application you had some assumption on the 25 units
that you had assumed would come online and there must
have been some corresponding expense assumptions rolled
into that.
A. Correct.
Q. We would very much appreciate if Recology
could provide that into the record and to us so that we
have the opportunity to evaluate it, and perhaps using
that assumption we can come up with something that seems
reasonable for a larger number of apartment units.
A. Okay, yeah. I mean, any analysis that we
would perform, we would do not apartments in isolation;
it would be apartments and commercial combined.
Q. Right.
A. Just wanted to clarify.
Q. We would like to understand the basis of the
25. Because if the need is 50, hopefully we can come up
with some reasonable metric to apply to a larger number
understanding that it's not perfect.
DIRECTOR NURU: Okay. So we will go ahead and
start the Bulky Item discussion.
MS. DAWSON: I'd like to ask Dan Negron to
come up, but Mark Arsenault to stay.
THE WITNESS: (PORTER) So you'd like me to
leave?

```

Page 704

MS. DAWSON: Well, I wouldn't say it that way. Wait, John, before you leave, I don't know if the Ratepayer Advocate wants to ask any follow-up questions.

MS. DILGER: Not at this time.
MS. DAWSON: John Porter can leave. DAN NEGRON,
having previously been duly sworn,
was examined and testified as follows:
DIRECTOR NURU: Ms. Dawson, you may proceed.
MS. DAWSON: So you will not be surprised to learn that I have a few new exhibits to introduce. Let's see -- and I think I'm going to start with two related to the Abandoned Materials Collection program.

So I'm going to apologize in advance for the tiny type, which is one of the reasons why I thought it would be good out as an exhibit. I'll do my best for members of the audience to follow along here.

There's two. So I've introduced two different pieces of paper: one that has lots and lots of lines with -- you can see it actually up here on the screen, the gray and the blue and the green. And I'm going to move on after that to a discussion about collection by time of day -- and this is specific to Abandoned.

And then I actually have some additional
Page 705

\title{
Atkinson-Baker Court Reporters \\ www.depo.com
}
information that I'm going introduce in a minute about what it looks like when we start thinking about combining the two programs.

MR. PRADHAN: So just let's just make sure we introduce these. The one that's on the screen, Ms. Dawson, I think that's the "Abandoned Waste - Volume of Service Orders."

MS. DAWSON: "By Day of Week."
MR. PRADHAN: "By Day of Week" chart.
So we will admit that as Exhibit 94.
(Exhibit 94, "Abandoned Waste - Volume of
Service Orders by Day of Week [City],"
was admitted into evidence.)
MR. PRADHAN: And then the second chart,
"Abandoned Waste - SOs for Directly to Recology
Abandoned Waste Only by Hour of Day," we'll admit that as Exhibit 95.
(Exhibit 95, "Abandoned Waste - Volume of
Service Orders by Hour of Day [City]"
was admitted into evidence.)
MS. DAWSON: Thank you.

\section*{EXAMINATION}

BY MS. DAWSON:
Q. Okay. Mr. Negron, I'm going to kind of ask you to help walk through. I know it's hard to read, Page 706

\section*{so I apologize.}
A. I'm okay.
Q. Okay. So we've been evaluating a couple of different elements in the programs. Right now, the Abandoned Materials Collection is a program that runs every day but with slightly varying crew size at least on Sundays where there's fewer crews. And the initial proposal in the rate application was to add to both the Bulky Item Recycling and the Abandoned Materials Collection program, and then we asked for Recology to consider combining it; so we're looking at that and that's kind of where some of this discussion will be leading for the next few minutes.

But before we get there, what we started doing -- and this is data that we collect, but also data that Recology receives through the City's 311 request for service. And what we wanted to do is look at what the volume of service requests look like by day of the week, because we suspected that the volume of requests actually varied quite a bit. And one of the evaluation points that we've been trying to consider was what do we do? Do we look at weekends differently than weekdays? And right now, we have kind of even service except for slightly less service on Sunday, and should we be looking at whether that needs some -- you know, whether
there's any adjustments that might make sense to be made in light of what we see.

So what this exhibit shows is we've color-
-coded -- so on top it shows you fiscal year '16, the
first row of bars, and then on the bottom it's fiscal year '17. And I'm just showing for an example here the months from July to December, although we did look at it all the way through the calendar year on both years, and what it seems to show repeatedly is that Mondays are the highest demand days. Generally speaking, the weekends are the lower demand days and Sunday in particular being the lowest demand for service in terms of the calls that come in on Abandoned Material. And then the remainder of the week is relatively constant.

And Mr. Negron, does that kind of seem to the
be consistent with what your crews are seeing out in the field?
A. (NEGRON) Yes.
Q. Okay. So this is foundational for where we're going to -- what we'll talk about later when we get to looking at combining both programs.

So I'm going to move on to the next exhibit. I have to see by shape here.

So one of the things that Recology had proposed in its initial consideration of combining

Page 708
both programs was to shift the time of day that service would be provided. And currently, service is provided starting at 8:00 in the morning and it goes until 3:30.
A. To 4:30.
Q. Okay, 4:30. Sorry. That's true.

And then we looked at what the shift would look like if we started at 6:00 a.m. and continued till not as long into the afternoon. And what I wanted to point out here in this exhibit is that by keeping the service starting at 8:00 a.m., you actually are able to cover more of the calls that come in during that day within that -- within a closer period of time. Whereas if you -- and that's because the calls for service are generally shifted more towards the afternoon.

And what you can see in these distribution charts, the top one shows the purple kind of matching the time of call coming in in the later-shifted service hours, whereas the second row shows the shifting to the earlier time. And what you can see, because the calls really don't start rising significantly until 8 o'clock, and there are calls that come in before, but they're relatively smaller in the call volumes. They start going up at 6:00, but not to as great an extent as what happens in the afternoon. So what you see is that -and I guess in statistics, we have a rather long tail to

Page 709

\title{
Atkinson-Baker Court Reporters \\ www.depo.com
}
```

the right of service calls that come in. And the calls
continue at about that same level through till pretty
late into the evening. Now, we understand that there
are limits in terms of what makes sense in the field, so
you might look at some alternatives on off-hours service
due to things like congestion in the afternoon. But
generally speaking, the citizens of San Francisco are
calling in these calls starting at around 8:00 and
continuing till about 8:00 at night in somewhat
significant numbers.
Now I'd like to kind of move the discussion on
towards looking at these two programs combined, and I'm
going to show them --
So I'm going to actually start --
MR. PRADHAN: Ms. Dawson, why don't you let us
know what this is and we'll mark it as Exhibit 96.
(Exhibit 96, "Analysis of AMC/BIR Service
Orders [City]," was admitted into evidence.)
BY MS. DAWSON:
Q. Sure. So this is an exhibit of actually six
different images that explore the ways in which the two
programs kind of work and could potentially work
together. It shows a reflection of the service orders
received. It also evaluates the potential for looking
at treating the northeast section of town differently

```
Page 710
than the other parts of town. And there are some maps
that illustrate kind of what the calls for service look
like on a citywide basis. And then the last two images
kind of explore the hourly volumes -- in other words,
kind of what the two programs look like from a service
request perspective?

And I might clarify that the thing that's interesting or challenging about combining the two programs is right now the Bulky Item Recycling is done on an appointment basis and is scheduled in advance, whereas the Abandoned Materials Collection is done pretty much as the service calls come in. Although, there are some Abandoned Materials calls that can be routed and are routed and done the next business day. So in effect, what happens is after 4:30, any calls that come in aren't collected at that time, but they are efficiently routed so that they're covered beginning at 8 o'clock by the crews that go out. And then as the service calls start coming in, they go from a pre-planned routing to a more dynamic situation.

So I think what might be helpful would be to show the Abandoned Materials Collection map first, although I know that's not the order of the exhibit. I'm going to go ahead and put that up.

So what this shows is the calls for service
```

that were received from July to December of 2016, Monday
through Friday only. Because as I've showed you, the
Monday-through-Fridays are much busier than Saturday and
Sunday. That doesn't mean there aren't any calls, but
it just isn't nearly the volume. And what you'll notice
by looking at how blue certain parts of town is, is that
the demand for service is not equally distributed in
San Francisco; it's actually quite focused in certain
parts of town. And in particular, the northeast part of
town and potentially going down to the corridor along
the Mission is really where the focus of the service
requests are. That doesn't mean there aren't other
requests in other part of town; there certainly are.
And that leads us to believe there are real benefits to
being able to combine both programs, but it may be a
little more complex than what we had been potentially
been originally considering.
So the second map is an overlay, and that
combines Recology's data. So right now, the Bulky Item
Recycling program -- it's described here as "Removal,"
but it's really "Recycling." So if you look at this
map, what you can see is the overlay of the pinkish
color, which is all the requests that are being serviced
by Recology and scheduled overlaid with the Abandoned
Materials service calls. So there is a nice overlap,

```

Page 712
but still that pervasive blue does remain in certain parts of town where there's a clear, more focused demand than other places.

Okay. So this data shows the service orders received together for both Abandoned Materials and Bulky Item Recycling. And I'd actually like Mr. Negron to help walk through a little bit about how he thinks this would work from an operational perspective.
A. (NEGRON) So I'm looking at the average of 7,554 for rate year '16 or fiscal year '16, and then it looks like it goes up 18\% for rate year/fiscal year 2017 with 8,933 . I can tell you the benefit of combining the two programs and allowing us the opportunity of more
time to route these efficiently. We'll support our efforts to use the existing staffing, which as I understand is a big component.

It's a big ask right now to ask for two crews, one for each program. But if we combine the two, I am comfortable to say that the 20 drivers and the 10 crews can work together in ten zones to work more efficiently and pick up both the pink and the blue, and also deal with the real-time calls that are coming in day-to-day.

I think we've spoken about this as a staff.
The biggest challenge is if you combine the two
programs, will the four-hour service level agreement be
Page 713

\section*{Atkinson-Baker Court Reporters \\ www.depo.com}
a hindrance as far as chasing that tail instead of gaining the benefits of routing the information?
Q. Right. So you're currently looking at what you thought you could achieve. I'm going to move us to another image that \(I\) think might help in this discussion.
A. Mm-hmm.
Q. So you've seen a lot of the maps. One of the things that we were interested in is maybe looking at ways to address the northeast part of town potentially slightly differently than the rest of the city, and I'm wondering -- you know, understanding that you're still kind of working on what the operational plan is. I'm wondering if you can kind of speak a little bit to this data and what your thoughts are in terms of how you might handle it.
A. For the northeast section-- it's kind of interesting, because you see an inversion as far as you have more Abandoned Material behavior and less of the Bulky Item Recycling requests. And so I kind of see the City's concerns that they would need the support for the AMC exclusive in the northeast section -- Tenderloin, South of Market.

So versus the rest of the city, looks like the folks are generally using the Bulky Item Recycling

Page 714

\footnotetext{
program in lieu of the AMC. So I can see operationally that we would support additional crew however we end up doing the math.
Q. So what are the opportunities that you think might work just in terms of -- what might you consider doing?
A. I would definitely consider an exclusive AMC
collection crew of a rear-loader and what we call a
"MEA truck," a Mattress, Appliance, and Electronics -to exclusively work together with Public Works in that northeast section.
Q. And then the remaining, there would still be kind of the zone system for your other crews?
A. Yes. For the combined program and the other areas of the city.
Q. So were we thinking that those crews, you said
the 10 and 10 combined would be able to cover most of -you kind of have a blanket of coverage, and then you would have this targeted crew that would address this differential between the two issues, I guess, or programs?
A. Yes. Operationally, it could be done.
(ARSENAULT) Yeah, I'll comment as well.
Just a couple of high-level things to consider. As we
look at this, as you know, we contemplated two routes in
}

Page 715
```

keeping the program independent, but there's clear
advantages of combining them. And there's a couple of
things that we'll be looking at.
Certainly geographically by combining them,
then you've got all these pink dots and blue dots to
each other. So you've got efficiency there. Presently,
100% of the Bulky Item Recycling is pre-routed; so we
use a system to essentially route that efficiently.
And under the current scenario for the
Abandoned Waste, because it's all essentially
dynamically routed as you've described except for the
calls that come in after 4:30, then it's largely much
less efficient. So to give you an example of how less
efficient, you separate the two programs. Then you've
got roughly 30% improvement in productivity for the
pre-routed collection versus the un-routed collection,
and that's just sort of where you start from.
So the more of the abandoned material that can
be pre-routed, that will add efficiency to the program
because we see it separately. We will continue to see
it under the combined program so the efficiency factor
goes up the more you can pre-route.
Q. And so that kind of leads us to needing to
continue exploring and understanding what response times
look like, what cutoffs look like. As we mentioned

```

Page 716

\section*{before, anything after 4:30 now is routed to the next} day. I would also say that I think there's the potential to look at hours of operation. So we've talked about -- and you were able interested in shifting hours of operation earlier. I think it's possible that for Abandoned Materials, that doesn't seem to work very well, but it could work. There might be targeted areas. I think maybe a little bit more work needs to be done to assess just what the appropriate hours of operation are, and maybe there are differences in different places and having different crews starting at different times might mitigate some of the impacts that you're seeing.
A. They clearly don't have to all start at the same time even combined as long as they're both being picked up from. So there could be areas of the city where 6 o'clock might be extremely beneficial, and we've shifted a lot of our downtown work to night work. We are just really trying to stay of the heavily--impacted areas. And so when you're working through some of these denser areas of the city in the middle of the day, you just cut your efficiency basically in half from when you're working those areas when there's not so many people. So yeah, definitely that's something we should look at.

MS. DAWSON: Okay. That's all that I have for

DIRECTOR NURU: Okay. Mr. Baker, would you like to do cross-examination?

MR. BAKER: No, I don't have anything right now.

DIRECTOR NURU: Okay. The ratepayer Advocate, would you?

No? Okay. Are there any other topics that you would like to cross-examine?

MR. BAKER: No. That's all we have for today.
DIRECTOR NURU: That's all you have for today?
Okay. All right. Then I think we'll move
into public comment period. Could I see hands of people wishing to speak?

Okay. So I'll allow five minutes per person to comment. And since this is public comment, you do not need to be sworn in unless you intend to present material that you'd like to have placed into the record. And if that's the case, I'll have our clerk swear you in. Also when you come forward, please state your name so that the court reporter can enter it into the record.

Thank you. And let the first speaker come forward.
//I
Page 718
```

PUBLIC COMMENT BY TOM WILLIAMS
MR. WILLIAMS: Good morning. My name is Tom Williams. This morning, I wanted to address another aspect of the split-billing program. Thursday, I received a letter from Recology advising me there isn't a way to document a shared black can in our system with two accounts. I don't understand how the system can take care of split billing for the blue receptacles and the green receptacles but not the black receptacles. It doesn't make sense to me.
Also, if we look at the chart that lists Recology's charges and we get to the policy statement in there about charging 150\% of fees, they talk about the fees for access, for distance and for volume. And when it talks about volume, it doesn't make any distinction as to which type of container; so there's a disparity between the stated policy and the policy as executed.
So therefore, this morning I want to request you to direct Recology to reconfigure their system to allow for billings -- split buildings the black receptacles. Thank you.
DIRECTOR NURU: Thank you.
Next speaker, please.
PUBLIC COMMENT BY DAVID PILPEL
MR. PILPEL: David Pilpel. I've already

```
introduced, I think, three exhibits, but I don't think
I've been sworn in. Did I need do that? I certainly
get sworn at regularly, but I'm just wondering.
DIRECTOR NURU: Swear him in.
DAVID PILPEL,
having first been duly sworn,
was examined and testified as follows:
MR. PILPEL: Formalities.
And I appreciate in the Abandoned Material
presentation the colored dots. I think that represents
the Bluish community, and I think that's too good.
I'm even wearing the shirt today.
Moving back to some of the earlier items,
I think the question was asked of Garth about the \(25 \%\)
capped increase. The 2013 Director's Report and Rate
Order had a \(25 \%\) cap for the first year, and I'm not
sure what it did for the second year. Perhaps Staff
can explore a \(25 \%\) cap across the board for the various
customers types if they see no change in service
instead of the \$5 dollar credit for the 20-gallon
customers, because there's some that have dis-
-proportionate impacts and it might just limit the
effect of the disproportionate increases.
I think the question was also asked about the
96-gallon black container. For the few customers on the Page 720
residential side that use it, even if you incentivize or discourage the use of the 96-gallon black, it seems to me that it shouldn't necessarily go away as a container type because it's just going to result in a 64 and a 32 for the same amount of material which results in two lifts, two pickups, rather than one; so it actually reduces efficiency and works against some of our efficiency goals notwithstanding the fact that they're waste generators. But perhaps Staff could further explore whether that can be kept as a container type even if it's discouraged.

I think the R3 analysis was very clear and very helpful in understanding a lot of the details about the residential service mixes. As I've stated on a couple of other occasion, I don't think the minimum service requirements have been properly addressed here. If I understand correctly, it's currently a 16/16/4 minimum service per residential unit and it's proposed to go to \(16 / 16 / 8\). If you apply that based on the number of units, the analysis should show that there are some -- not really single-family, but multi-unit buildings that are getting less than minimum service now and would certainly be getting less than the minimum service under the proposed increase. If Staff can examine that pretty carefully, I think that there -- as

Page 721

\section*{Atkinson-Baker Court Reporters \\ www.depo.com}

I said before, I think that there really is revenue on the table that should be included in the base rate, and it's up to the Company to chase those customers and address their minimum service. But if single-family residents are being held to a 16 or 20 minimum with the attendant minimum on blue and green, I absolutely think that apartment customers should as well.

In particular, the charts that R3 had today, Exhibits 88 and 89 , some version of that I think should be included in the reporting requirements for the quarterly reports; so what the actual migration was to by account configuration. Not just the total numbers, but the particular configuration of service types should be reported on a quarterly basis so we can see how the actuals compared to what was projected. In fact, the report should show what was projected for that rate year or quarter and what the actuals were so the variance will be more obvious rather than waiting for the next rate cycle.

In general, the idea is that if you use more, you should pay more. So to the extent that there is some disproportionality, that makes sense, and so I don't mind the large increases and large decreases if we're realigning the rates to better match the costs. That actually makes sense even if it's implemented over Page 722

\section*{time.}

The fixed and variable rate discussion has a lot of consequences. I think you can certainly argue that a lot of the labor costs are fixed. I would also argue that one of the labor costs related to the three collection streams could just as easily be allocated to those collection streams and recovered in that way and that the majority of all of the fixed costs should be for those things that are not related to the three streams, the general administrative, HHW, Gigantic 3, programs like that. And so I think there are different ways to look at fixed versus variable. It's not a single analysis, and to that extent, I don't really entirely agree with the Armanino report.

Furthermore, I think the trend of the three streams -- the blue, black, and green -- processing and disposal costs are moving toward a similar range. Traditionally, black has been the lowest overall cost of collection, processing and disposal, with the green and blue being somewhat to significantly higher. As we get into the black processing and as the composting and recycling costs tend to not change as much, I think the black is increasing and the blue and green not as much; so the range of difference is smaller in the future and will likely to continue the trend that way.

Page 723

I'm very impressed with the sophistication of the modeling that R3 has done. It's certainly better than anything I could do, and that's been helpful.

It want to talk about the ZWI targets for a moment. The Staff Report -- and perhaps Staff can talk about this later. I pointed out that there was an error on page 28 in the Staff Report, the Recology's proposed targets. I think this was a first pass, but there were some errors in how that was presented and I think there needs to be a revised presentation of the ZWI proposed numbers. I do understand that the second chart with -on the bottom of 28 that shows how the ZWI targets would change if both Contingent Schedules are triggered is correct. I do note that the chart at the back of the R3 attachment also shows this information in a slightly different way what -- and I would appreciate if R3 can just validate the numbers. They probably generated them.

In any event, what strikes me in particular is that the dramatic change from the 409,000 tons disposed in 2016 to the 235-, almost 236,000 in Tier 4 for rate year '22, if both Contingent Schedules are triggered, results in like a \(40 \%\) drop in disposed tonnage. That would be great if we achieve that. They get their ZWI numbers, Robert looks great, we all feel great.

Page 724

The question is, is that realistic? Is there any way, given what we know and given what we can accomplish, that we would see a \(40 \%\) reduction in actual disposed tons over that period? It's a great aspirational goal, but I think an appropriate question to Staff and the consultants is, is that really realistic? And how much risk is there? And that leads to the other point about the ZWI targets, is does this appropriately incentive the Companies to make the changes in programs' behavior technology to accomplish that? I mean, for the ZWI program to work, it's got to be a meaningful incentive for the Companies to change things, but also realistic. So there's tension there, and I'm not sure that we've fully explored both of those issues about realistic and achievable and yet desirable and the level of incentive.

DIRECTOR NURU: I believe your time is up, sir.

MR. PILPEL: Yeah, I always get there.
We talked about organics tip fees. My colleague or friend Mr. Baker opened the door on the question of an adjusted O.R. given the level of risk. Perhaps we can explore that in the future.

DIRECTOR NURU: Thank you.
Next speaker, please.
Page 725

\author{
Atkinson-Baker Court Reporters \\ www.depo.com
}
```

MR. PILPEL: Thank you very much. PUBLIC COMMENT BY TRACY THOMPSON
MS. THOMPSON: Hi, thank you. My name is Tracy Thompson, and I want to first say that I do appreciate my garbage service immensely and what we're doing here in California.
I'm a 20-gallon ratepayer and I'm a 20-gallon bin user and also a CRV "pilferer" because I decide to bring my CRV recyclables back to the redemption center, which isn't all that fun. So I just want to say that the ratepayers -- the rate application statement indicates that we will get a $\$ 5$ dollar credit, and I want to know how long will we be given this credit. And then after a certain amount of time, will it go away? And I don't know if that's already been established here when this was in discussion.
I also want to add that the 20 -gallon scenario is only for single-family residents, and I don't know if people aren't -- it seems like when this under discussion, it wasn't known if this was for everybody. But 20 gallons -- the bin is really for single-family residents who contract that out; so that's under Code 290.
Also, keeping the 20 -gallon bin is not about getting a 4-gallon benefit or discount or having

``` Page 726

20 gallons versus 16 gallons. People who have used the 20-gallon bin for the last, what, five or ten years are the ones who are not generating a lot of trash. These are the people who don't -- who haven't dragged the bin out to the sidewalk because they don't generate a lot of trash; so it's not really about us enjoying the savings or us enjoying a discount, it's about us making zero-waste goals according to the City. So after -it's really Recology who is getting a discount for not having to pick it up at the sidewalk, so it's not the 20-gallon bin users who are getting the discount.

I also want to say that regarding this risk associated with -- yeah, "risk" associated with compost stations such as Hay Road or Blossom Hill, whatever it it's called, it seems to me that in order to avoid this risk that is included in the rate application now, it would be behoove Recology to go and get a contract for future use and contract negotiations in place so that they have an idea of what that cost might be in the future instead of complaining that there's a risk and we won't be able to pass this on to ratepayers until the next application, so we're going to take a big loss in this risk. So I think that's that that's important to mention that any company who does business with other companies, you know, future contracts or production or
garbage planning would probably be a good idea, and that's really all I have to say. Thank you.

DIRECTOR NURU: Thank you.
Any other speakers?
If that's the last speaker, then I will officially close public comment. And at this time I will continue this hearing to Wednesday, May 3rd, at 8 o'clock in the same room, Room 400. We will pick up with the agenda items the we will list for that day. And again, I'd just like to thank everyone for participating in these proceedings and our meeting is adjourned.

Thank you very much.
(Ending time: 11:10 a.m.)

Page 728

\section*{REPORTER'S CERTIFICATE}

I, MAXIMILLIAN A. CONTRERAS, CSR No. 13876, Certified Shorthand Reporter, certify:

That the foregoing proceedings were stenographically reported by me at the time and place therein set forth and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney or any of the parties nor financially interested in the action.

I declare under penalty of perjury under the laws of California that the foregoing is true and correct.

Dated this 5th day of May, 2017.

MAXIMILLIAN A. CONTRERAS CSR NO. 13876

achieve 630:20 647:12 648:24 686:15714:4 724:24
achieved 688:4
achieving 701:9
across 648:6 720:18
Act 622:3,8
acting 675:12 683:14 action 729:13
activities 622:10
actual 649:11 677:22 722:11 725:4
actually \(630: 23\) 632:3
634:23 649:2 656:15
660:16 662:2 663:11 667:9 672:24 679:2,6 688:23,24 691:2 692:8 699:22 700:6 702:8,16 705:21,25 707:20 709:10 710:14,20 712:8 713:6 721:6 722:25
actuals 722:15,17 add 630:8 665:25 674:5 702:16 707:8 716:19 726:17
adding 697:5
addition 629:10
additional 623:9 628:9
629:11 634:23,25 636:17 643:1 666:6 667:23 681:18 682:13 694:12,18 695:10,12 695:21,23,25 696:9,11 696:13,14,16,17,19,19 697:4,5,7,8,15,16,25 698:1 705:25 715:2
Additionally 667:24
address 657:1 670:6,8
673:23 698:7 699:17 703:2 714:10 715:19 719:3 722:4
addressed 656:17 699:18 721:16 adjourned 728:12 adjust 646:14 648:23 651:14 669:12 671:8 adjusted 643:21 666:5 725:22
adjustment 694:10
adjustments 628:11 646:21 708:1
Administration 618:3
administrative 696:21 697:22 723:10
admit 706:10,16 admitted 624:5 625:21 631:13 632:15,19 639:15 643:3,5 683:20 690:14,18,20 706:13 706:20 710:18
adopted 666:5
advance 705:15 711:10
advantages 716:2 advising 719:5
Advocate 618:12 623:8 623:15 642:18 705:3

718:7
affect 644:1
affecting 677:17 678:11
affects 676:19
affiliate 667:1
affiliated 667:15
affiliates 669:19
affirmative 675:20
after 680:8 705:23
711:15 716:12 717:1
726:14 727:8
afternoon 709:8,14,24 710:6
again 638:22 645:19
646:20,24 656:8
662:13 663:5 680:14
682:17 686:6 689:5 692:10 728:10
against 702:11 721:7
agencies 626:25 659:12 666:4 668:4
agenda \(621: 8728: 9\)
aggregate 701:1
ago 653:6 689:15
agree 654:19 662:11
663:19 664:2,18,21,22 665:23 681:5 723:14
agreed 651:20
agreement 628:5 630:3
680:15 713:25
agreements 664:7
ahead 625:14,17 639:8 642:25 643:14 649:3 704:20 711:24
aims 630:19 648:24
Alameda 623:24
albeit 650:10
aligning 673:14
alignment 648:12 650:12
allocated 723:6
allow 718:16 719:20
allowed 656:2
allowing 675:17 713:13
almost 630:10 724:21
along 643:24 705:18 712:10
already 634:10 668:13 677:7 687:4 719:25 726:15
alternative 619:21 643:4 643:11,16 646:15 647:9
alternatives 635:6 636:22 638:17 644:24 646:11,14 669:8 710:5
although 635:10 638:7
708:7 711:12,23
always 725:19
AMC 628:25 629:14 673:13 714:22 715:1,7
AMC/BIR 620:5 710:17
among 641:7
amongst 698:25
amount 627:22 630:13 636:25 640:16 650:24 651:2,10 702:12 721:5 726:14

\section*{analysis 620:5 623:1}

639:21 644:8 649:16
656:19 657:14,16
685:9 686:10 693:2,18
697:9,13 703:4,10
704:11 710:17 721:12
721:20 723:13
analyst 663:22
analyzed 622:16
and/or 692:17
angles 653:14
announcement 622:1,6
annual 684:9
another 632:7 641:24
647:9 680:25 701:23
714:5 719:4
answer 683:24 695:8 703:24
answered 675:20
answers 675:14
anticipated 669:14 695:12
anybody 663:7
anymore 655:13
anything 628:10 638:4
660:23 670:11 677:21
680:11,17 717:1 718:5 724:3
apartment 619:24 631:2
639:2,3 684:22 685:3,9 685:14 689:21 690:11 690:19 693:15 694:6 694:19,22,24 695:17 696:6,15,16,24 697:8 697:25 700:16 703:7 703:18 704:10 722:7
apartments 689:18 691:22 701:9,25 704:12,13
apiece 641:14
apologize 705:15 707:1
appears 634:14
appendix 624:10,12,15 624:17
apples-to-oranges 672:20
Appliance 715:9
APPLICANT 618:13
application 617:4 621:11 625:12 626:1,17 627:5 627:16 628:2,7,20,21 629:16,23 630:20 637:21 638:23 640:23 650:15,21 658:13,23 658:24 661:25 666:13 666:22 669:13,24 674:17 675:4 677:20 679:24 680:5 684:3,6 684:21 685:22,23,25 686:16 690:10 693:14 695:15 698:21 699:11 700:14 701:12 704:1 707:8 726:11 727:16 727:22
applications 626:4 660:13 664:8 669:15 674:19
application's 638:25 applied 670:25 699:5,6 applies 669:24
apply 647:25 648:5,8,14 648:19,25 666:22 704:18721:19
appointment 711:10
apportions 650:3
appreciate 704:6 720:9 724:16 726:5
approach 647:17 657:5,7 661:6 662:7 685:13 693:25 698:19,20
appropriate 654:10 656:25 657:9,11 659:3 659:6 663:9,20 667:11 667:17 668:8,10,13 675:19 677:3 698:12 717:9 725:5
appropriately 725:9
approved 628:21 634:3
approximate 695:11
approximately 649:22 687:2
approximating 698:14
April 617:12 621:1,8,12 area 648:22 660:19
663:11 664:19 665:17
665:21,25 666:18 672:8 678:14 682:2 688:18,21,22 691:9
areas 656:16 664:15
681:14,21 697:11
715:15 717:7,16,20,21
717:23
arenas 629:15
argue 723:3,5
argued 693:22
argument 648:14 663:16
arguments 702:11
Armanino 649:17 723:14
Arnold 618:14
around 623:23 630:16,22 631:25 636:21 645:7,8 647:7 649:13 654:3 679:5 681:3 685:10 687:15710:8
arrangements 664:6
Arsenault 618:17 619:7 619:9 682:16,20 687:13691:1 699:17 700:20 701:7 704:23 715:23
asked 626:19 672:7 675:16 677:2,10 679:22 681:14,14 707:10 720:14,24
asking 681:16 686:25 687:6
aspect 719:4
aspirational 725:5
asses 657:5
assess 717:9
assets 656:18,24 657:16 658:12,22
assist 627:4
associated 628:18

694:16 695:10 697:4
727:13,13
assume 655:24 696:5
assumed 685:22 686:4
695:7 704:2
assumes 685:25
assumption 655:23 684:21 693:22 704:1,9
assumptions 626:8 627:17 704:3
assurances 661:9
ATKINSON-BAKER 617:21
attachment 724:15
attendant 722:6
attending 622:12
attorney 618:9,9 683:13 729:12
attributed 628:12 649:24
audience 705:18
audited 676:2
Authority 624:2
automatically 680:23,24
available 621:15 651:18 651:22,24
average 636:21 641:9,20 642:1,11 645:7 647:8 647:19 658:19,20 699:9,15 713:9
avoid 727:15
aware 665:20 666:2 669:6 676:15
away 721:3 726:14
awful 625:6
a.m 621:1 682:9,10 709:7 709:10 728:14

B
B 617:8 618:5 619:14 620:1
back 650:15 654:17,19 659:19 667:6 669:12 672:18 682:7 720:13 724:14 726:9
background 626:16,21 659:14
Baker 618:13 619:4,6,7 652:12,14,17 670:11 675:16 677:2,10 679:17,20 682:3,12,15 682:24 683:1,2,7,8,11 683:22,25 684:7 690:15,22 699:16,22 700:3,11 718:3,5,11 725:21
Baker's 675:14
balance 635:16
band 686:25
barely 691:24
bars 708:5
base 636:10 651:5,16 702:24 722:2
based 631:24 635:14 640:11,22 650:4,21 654:3 655:22 658:18 658:20 661:4 663:25 669:14 674:16 675:5

721:19
basic 645:2
basically 717:22
basis 639:20 640:15 641:2,13 651:19 656:5 658:17 684:9 704:16 711:3,10 722:14
baskets 691:20
batteries 692:8
Bay 648:22
bear 648:19 681:6
bears 666:19 669:17
becoming 665:12
before 621:19,25 625:8 626:18 652:25 683:2 683:11 693:21 705:2 707:14 709:21 717:1 722:1
begin 622:25 675:16 682:12
beginning 649:7 711:17
behalf 683:14
behavior 630:13 693:16 714:19 725:10
behind 691:4
behoove 727:17
being 621:21 641:8 648:24 650:2 661:6 666:5,7,21 671:9 674:20 685:8 700:1 702:7 708:11 712:15 712:23 717:15 722:5 723:20
believe 624:19 647:14 659:6 660:16,24 661:10 662:16 668:10 670:25 674:13 694:13 703:5 712:14 725:17
below 641:9 691:13
benchmarking 658:9
beneficial 717:17
benefit 673:11 702:19 713:12 726:25
benefits 673:7,12 696:20 712:14 714:2
best 705:17
better 634:9 638:20 641:23 642:6 647:9 673:1,20 687:5 692:15 722:24 724:2
between 628:1 631:2,25 632:2 637:2,5 638:3,4 643:13 648:2,9,12 650:3,17 664:12 669:6 672:19 680:15 695:13 703:23 715:20 719:17
BIC 628:24 629:14 673:13
big 636:6,20 641:8 713:16,17 727:22
biggest 634:14 677:25 689:23 713:24
billing 719:8
billings 719:20
bin 659:1 672:3,5 691:20 691:20 726:8,21,24 727:2,4,11
bins 673:4,16 674:25 691:11
bit 627:19 628:16 631:22 632:6,10 633:6 634:22 637:22 639:5 640:17 644:18,22 647:21 649:2,5,6 662:24 663:18 664:14,25 665:1,9 675:3 687:5 698:10 700:24 701:24 707:20 713:7 714:14 717:8
black 659:1 719:6,9,20 720:25 721:2 723:16 723:18,21,23
blanket 715:18
Blossom 668:22,25 675:24 679:25 680:7 680:12,20 727:14
blue 630:9 678:6 691:20 705:22 712:6 713:1,21 716:5 719:8 722:6 723:16,20,23
Bluish 720:11
board 624:2 720:18
booked 660:9
both 625:11 632:12 639:25 641:11 663:14 673:3 682:18 688:19 707:8 708:8,21 709:1 712:15 713:5,21 717:15 724:13,22 725:14
bottom 708:5 724:12
bow 663:3
box 622:21
Brannan 691:2
break 653:25 655:11 682:7
breaking 653:18
brief 642:22
briefly 622:24 625:10,24 653:5
bring 726:9
bringing 689:3
broker 664:8
Bruen 618:10 619:5 675:10,12 679:14,22 681:14
building 672:22 673:3,17 687:19 688:15,16 690:5 691:1 692:2 694:1,25 695:2,4 697:10 700:22 701:19
buildings 672:10 685:14 685:15,17 686:11,19 686:21 687:9,12,22 688:3,8,18,22 689:7,13 690:4 691:3 692:14,18 695:10 696:15,17 697:18 703:7,11,13 719:20 721:22
built 702:13
bulk 625:9
Bulky 696:24 697:2 699:20 702:22 704:21 707:9 711:9 712:19

713:5 714:20,25 716:7
bullet-points 662:11
bump 645:8,19 646:1
656:6
busier 712:3
business 622:24 627:23
628:3,10 650:13
652:21 653:13 663:19
675:18,19 677:4
678:23 711:14 727:24
businesses 663:22
664:1,3
buttons 691:24
buy 693:16
B3 674:20
C
C 618:1 621:2
CA 617:9 618:5,8,15
cabinet 691:20
calculated 640:22 658:16
calculation 638:25 639:2 698:21 699:8,13
calculations 626:16 656:21 676:12
calendar 708:8
California 648:22 726:6
729:15
call 623:17 650:19 709:17,22 715:8
called 639:10 727:15
calling 645:18 710:8
calls 684:13 708:12
709:11,13,19,21 710:1
710:1,8 711:2,12,13,15
711:19,25 712:4,25
713:22 716:12
cap 670:20,25 720:16,18
capacity 628:9 634:23
638:21 655:7 673:21
679:3 696:17 697:11
702:13,16,19 703:5,12
capital 629:18 656:18,24
657:5,16 658:12 659:3
660:22 662:6 675:18
696:20 700:21
capped 720:15
caps 648:7
capture 621:23
care 626:14 719:8
carefully 721:25
Carlton 617:8 618:5
carried 635:19
carry 692:8
carrying 688:17
case 664:2 718:20
cases 687:1
catch 652:20
categories 626:11 628:4
628:22 636:6,8 641:12
641:14,15,15,18
642:15 646:9 650:1 673:9
category 628:13 629:7,9
641:24 642:8
Cathedral 691:22
caveat 703:3
center 618:14 726:10 Cerrito 653:11
certain 646:18,19,19
652:1 657:25 658:9
659:11 664:3 694:13
712:6,8 713:1 726:14
certainly 650:11 659:7
701:7 712:13 716:4
720:2 721:23 723:3
724:2
CERTIFICATE 729:1
Certified 729:5
certify 660:9 729:5,11
cetera 666:17 697:12
CFO 660:15
challenge 701:8,11 713:24
challenges 667:18
challenging 711:8
champion 687:19 700:22 701:18
chance 624:24
change 619:18 628:5,12 628:14,19 629:11,20 630:2 631:12 633:4 637:15,20 643:25 644:1 649:11660:8 665:5 671:2 676:18 677:13,14,17 678:9,10 678:21 685:10 687:24 688:7 689:9 691:7,15 693:12,20 700:15 701:14 720:19 723:22 724:13,20 725:12
changed 661:13,20 688:10
changes 629:10,17,24
635:23 665:3,5,6,16,20 665:25 666:3,16,17 667:23 671:10 681:8 681:17,18,19,21,22 688:5 692:18 693:1,3,6 693:9 725:10
changing 665:11 702:15
charge 631:17 637:2,23
642:19 644:1,12
646:22 652:5 669:1 673:9,18 679:25
charged 640:11 641:1 678:2
charges 644:5 646:23 647:4 719:12
charging 719:13
chart 639:10 641:10,11 655:18 706:9,14
719:11 724:11,14
charts 709:16 722:8
chase 722:3
chasing 714:1
check 654:18
chunk 630:7 636:20
chute 619:23 688:8,12
688:17 690:17,25
691:2,5,8
chutes 688:7,8,14,23
citing 702:6
citizens 710:7
city 617:1,7 618:4,9,9,10 619:17,18,19,20,21 620:3,4,5 \(621: 6\) 623:7
625:21 626:2 627:4
628:9 629:5 630:19
631:13 632:19 639:14
640:8 643:5 653:10
675:12 684:5,9 685:14
687:9 706:12,19
710:18 714:11,24
715:15 717:16,21 727:8
citywide 711:3
City's 623:1 648:11 707:16 714:21
Civil 622:3,8
clarification 674:11 701:6
clarify 674:18681:16 682:2 700:25 701:2
704:15 711:7
clarifying 694:20
clarity 667:22
classified 694:23
clear 681:25 713:2 716:1 721:12
clearly 621:23 628:4,12 629:16 691:5,25 693:10 717:14
clerk 622:1 718:20
clients 668:16
cling 628:8
clip 686:20
close 648:17 728:6
closely 698:8
closely-correlated 648:12
closer 635:15 709:12
Code 726:23
coded 633:7 708:4
codes 633:15
COLA 666:23 698:21 699:8,12
colleague 725:21
collect 707:15
collected 649:12 650:25 711:16
collecting 689:3
collection 621:12 622:21 629:2 636:3,5 649:9 650:18 667:14 668:9 668:19 669:1,21 673:4 677:3 694:17696:18 696:25 697:21 703:6,8 703:13,21 705:14,23 707:5,10 711:11,22 715:8 716:16,16 723:6 723:7,19
color 708:3 712:23
colored 720:10
column 633:3,6 640:9 646:12 655:21
combination 642:9 674:23 675:6
combinations 645:1,5
combine 712:15 713:18

713:24
combined 704:13 710:12 715:14,17 716:21 717:15
combines 712:19
combining 706:3 707:11
708:21,25 711:8
713:12 716:2,4
come 621:4,22 628:13 640:13 647:16 662:16 667:24 669:12 682:16 693:1 695:18 704:2,9 704:17,23 708:13 709:11,21 710:1 711:12,16 716:12 718:21,23
comfortable 661:6 713:19
coming 623:21 692:1 701:18 709:17711:19 713:22
comment 619:10,11,11 623:13 715:23 718:14 718:17,17 719:1,24 726:2 728:6
comments 623:14
commercial 689:17
694:22,23 695:1,4,7 704:13
commercial-classified 703:22
communication 619:22 683:4,19,25 684:12
Communications 683:17
communities 635:17,23 649:4
community 622:17 720:11
companies 623:8 649:23 650:18 667:15 668:20 669:1,21 676:3 677:4 725:9,12 727:25
company 626:7,21 627:7 650:19 653:8 660:11 668:8,9,21 679:11 683:16,17 722:3 727:24
comparable 658:8 660:10
compared 638:11 655:7 667:19 669:23 722:15
comparison 619:20 637:24 639:11,13 651:9 655:2 672:8,19 comparisons 628:1 compensate 669:22 compensation 626:14 competitive 658:8 complaining 727:20 complete 622:13 687:24 692:10
completed 622:20 684:5 685:9
completing 622:14 complex 712:16 complexes 687:15 689:22,24
compliance 622:11 complicated 665:10 comply 622:2 687:12 component 647:18 648:18 662:8 666:25
667:12 668:14 669:11 713:16
components 652:5
composing 634:9
compost 633:13 675:15 727:13
compostable 692:13 compostables 631:19 692:4 696:22
composters 668:23
composting 628:5 629:2 629:19,20 633:11 637:24 644:5 663:15 664:13,20,25 665:4,16 665:25 666:7,10,18,21 667:1,13,16,18,25
668:11 670:4 676:8,17 678:2,18 679:1,24 681:8 686:9 723:21
composting's 665:9
composting-per-ton 629:21
comprise 636:9 640:7 comprising 646:10 conceptual 675:16 concern 642:18 703:15 concerning 622:1
concerns 670:2,6,8,9 677:20,23 714:21
conclude 650:22 659:5,6 700:2
conclusion 697:24
confidence 687:11 confident 693:19,19,24 configuration 722:12,13 confirm 675:7 congestion 710:6 consequences 723:3 consider 621:18 671:5 677:3 707:11,21 715:5 715:7,24
consideration 708:25
considerations 672:4
considered 630:14
669:15,20 695:1,4
considering 712:17
consistency 656:22 676:11
consistent 635:20 637:13 645:8 668:17 669:8 698:20,22 708:16
consistently 648:6 699:5 699:6
constant 708:14
constraints 629:24
consultant 623:1 consultants 725:6
consulting 624:20
626:23,24 627:1
consumer 671:17
consumers 671:4
consuming 634:7 635:7
consumption 641:22 642:7
contacted 684:11
contain 669:3
container 633:8,10,11,14
633:16,19 634:6,20
635:4 636:1,13,15
637:9,17 638:14,19,20
640:4 647:25 653:22
655:6 656:2,9,10,12
671:19 692:6 695:3
719:16 720:25 721:3
721:10
containers 633:16 634:9
634:11 636:15 654:1,2
654:24 655:12,16
671:22,22 689:6
691:12 692:2
contains 661:9
contemplate 688:1
contemplated 690:10 697:5 715:25
contemplates 701:13,14
Contingent 659:24 669:9 724:13,22
continue 634:21 655:11 655:19 656:11 683:1
710:2 716:20,24
723:25 728:7
continued 709:7
continues 648:5
continuing 621:10 694:3 710:9
contract 726:22 727:17 727:18
contracts 727:25
contractual 664:7 680:14
contrast 664:12
CONTRERAS 617:24
729:4,21
CONT'D 620:1
convenience 689:7
convenient 689:6 692:3
conversation 639:8
conversations 660:25
661:5 662:17,25 699:24
convert 685:15 689:25 692:13
convey 623:13
convinced 700:18
Copies 621:15
corporation 622:3
correct 624:11 627:18 630:20 634:17,18 638:25 641:6 645:22 646:4 652:4 653:15,22 653:24 655:1,3,8,9,20 656:13,19 657:13,18 657:21,22 658:1,2,6,8 658:9 662:19 664:16 665:12 666:23,24 668:23,24 669:2 677:9 679:13 680:2,6 681:1 684:10 686:2 693:16

693:17 695:19,23,24
696:3,4,9 698:3 702:4
702:5 704:5 724:14
729:9,16
correctly 721:17
corresponding 700:12
702:25 704:3
corridor 712:10
cost 625:12 626:11
628:11 629:20 634:23
636:3 640:17,24
645:24,25 647:13,19
648:13 649:6,16
650:12,23 651:13,21
659:7,9 665:17 668:2
669:11 673:4,6,10,14
673:15 677:25 678:1
678:11 681:23 695:10
697:7 698:2 702:23
703:9 723:18 727:19
costs 628:5,6,18 629:19
635:13,18 641:4
645:23 648:18 649:10
649:23,25 650:24
651:2,6,17 658:18
659:3 660:22 666:1
668:7 677:23 681:2,10
681:11,18 696:20,21
696:22,23 697:3,21,23
702:3,8,12 722:24
723:4,5,8,17,22
counsel 618:10 675:12
count 639:6
counts 628:18
County 617:1 621:7 623:24
couple 643:20,24 648:1 653:6,16 656:14,15,15 670:17677:10 687:16 694:24 707:3 715:24 716:2 721:15
course 641:1 679:7
court 617:21 718:22
cover 647:19 668:2,11
700:4,4 709:11 715:17
coverage 715:18
covered 711:17
covers 666:14
CPI 698:5
cream 698:11
create 667:22
created 625:18 627:25 688:24
creating 701:14
creative 691:17
credit 634:25 638:24
639:1 674:15,20 690:5
720:20 726:12,13
crew 707:6 715:2,8,19
crews 707:7 708:16
711:18713:17,19
715:13,16 717:11
criteria 658:1,13 687:16
critical 693:13
cross-examination
621:17 623:7 679:17 682:5 700:7 718:4
cross-examine 652:12
670:14 718:10
CRV 726:8,9
CSR 617:24 729:4,22
curb 673:16
curbside 629:12 636:5
current 633:6 636:18 638:19 639:23 640:10 640:13 644:4 648:11 655:16 669:14 670:3 670:24 677:7 716:9
currently 633:20,24 634:19 636:1,12,16
637:14 642:2,9 643:23
648:10 650:17 653:25
655:25 656:7 666:4
671:3,14 674:25 686:24 699:7 702:17
709:2 714:3 721:17
curve 649:3
customer 619:22 630:12
631:16 632:9,11
633:12 636:7 637:8
641:8 645:3,3 646:7
647:20 648:1 655:15
655:25 683:3,17,19,25
686:7 694:21 702:24 703:22
customers 631:3,21,25
632:1,2,4,23 633:19,20
634:5,15 637:5,7,10,19
638:1,2,5,5,23 639:2,3
639:3 640:15 642:2,9
643:13 645:16 647:7
651:18,25 655:7,11
656:11 672:7 674:14
674:21,23 684:11,22
686:17,23 689:17
694:6,12,23 695:6,18
695:21 696:6,9,24
697:4,8,15,25 698:2
702:18,18 703:18
720:19,21,25 722:3,7
cut 717:22
cutoffs 716:25
cycle 722:19
c'est 693:23
\(\overline{\text { D }}\)

D 619:1 621:2
Dan 618:18619:9 704:22 705:7
data 622:15 689:22 699:23 707:15,15 712:19 713:4 714:15
Dated 729:17
dates 654:16
David 618:20 619:11 623:23 719:24,25 720:5
Dawson 618:3 619:3,8,9 623:17,20 624:6,17,18 624:20,24 625:2,22 631:4,6,10,14 632:13 632:21 633:5 639:16 643:6 652:6,9,10 656:16 663:7,12 683:6

683:11,23 699:22 700:6,9 704:22 705:1,6 705:10,11 706:6,8,21 706:23 710:15,19 718:1
day 620:3,4 623:13 689:2 697:16,19 705:24 706:8,9,12,16,19 707:6 707:18 709:1,11 711:14 717:2,22 728:9 729:17
days 708:10,11
day-to-day 713:22
deal 673:1 713:21
December 683:5,18
708:7 712:1
decide 726:8
declare 729:14
decline 700:15
decrease 632:3 637:13 637:23
decreases 638:13 646:18 722:23
decreasing 678:16
default 637:21
definitely 701:8 715:7 717:24
degree 695:11
delta 695:12
demand 665:6 677:13 678:14,15,18,24 679:10 682:1 702:24 708:10,11,12 712:7 713:2
demonstrate 640:21 662:4
demonstrating 660:7,20
denser 717:21
Department 617:2 618:2 618:6 621:6,13,14 622:11 674:7
Department's 622:2
dependent 703:16
depending 645:13 654:4 670:7 685:18
Depends 678:25
depicted 693:6
depreciation 657:1,7
659:4 661:14,21,24
662:7,7
Deputy 618:3,9
describe 626:20 628:15 683:9
described 623:3 627:22 689:15,21 712:20 716:11
describing 688:2
description 650:21
designed 689:8
desirable 725:15
detail 625:15 627:11 632:7 634:4 663:6 676:11
detailed 627:3 642:21 643:16 650:8 681:4
detailing 661:13,16
details 670:23 721:13
determined 658:11 determining 698:12 developed 664:24 developing 665:11
development 658:25
de-emphasizing 647:12
difference 624:12 637:2
695:13 723:24
differences 717:10
different 631:5,7,25
639:18 643:12,12,20 647:4 648:25 653:14 669:6 681:21 689:4 700:18 705:19 707:4 710:21 717:11,11,12 723:11 724:16
differential 715:20
differently 630:25 707:22 710:25 714:11
difficult 689:8 693:11 694:21 695:5 701:19 703:23
dig 663:17 665:8
digester 623:24
Dilger 618:12 619:4 623:14 670:16 673:22 705:5
direct 649:1 719:19
directed 692:15
direction 647:11
directly 630:2 643:8 673:10,14 706:15
Director 618:2,3621:3,6 622:23 652:8,10 658:14 670:13 674:3,7 679:16 682:4,11,18 683:1 704:20 705:10 718:3,7,12 719:22 720:4 725:17,24 728:3
Director's 617:3 621:10 657:19,24 660:12 668:5 698:19 720:15
dis 720:21
disagree 698:13
discount 726:25 727:7,9 727:11
discounts 692:24
discourage 721:2
discouraged 721:11
discovering 698:5
discretionary 630:15
discuss 671:11
discussed 634:16
667:24 669:9 671:7 677:12
discussing 642:16 659:8
discussion 625:8 630:22
642:22 656:23 659:23 667:4 677:19 694:4 704:21 705:23 707:12 710:11 714:6 723:2 726:16,20
discussions 657:4 659:2 660:24 702:14
disparity 648:16 719:16
disposal 621:12 650:19 652:1 664:12,19

683:16 694:17 696:23
697:22 723:17,19
disposed 724:20,23 725:4
disproportionality 722:22
disproportionate 720:23
distance 719:14
distinction 719:15
distinguish 677:11
distributed 712:7
distributing 641:3,5
distribution 631:2,15
644:2,11,19 645:2
647:10 709:15
distributions 631:23
643:13 644:21
diversion 638:20 644:16 664:9 685:15,18,18 693:10 701:9
divided 640:12
dividing 653:21
document 622:10 624:1 624:11,13,15 626:9 643:2 719:6
documentation 626:13 627:17
documents 627:2
doing 627:8 643:11
647:20 650:13 686:21
687:4 707:15 715:3,6 726:6
dollar 674:15,20 720:20 726:12
dollars 631:17 637:1 641:20,25 642:10,20 643:25 654:4,8,25 695:23 697:20,21
done 627:11 640:10
643:7 662:6 664:1 689:4 693:21 697:9 701:20 711:9,11,14 715:22 717:9 724:2
door 667:21 691:4 725:21
dots 716:5,5 720:10
double 645:19,25
down 637:17 640:4 653:18 671:5,11,16 672:3,24 688:11,16,17 689:3 691:9,13 692:9 712:10
downgrade 636:23
downside 678:24 679:1
679:5
downsize 641:22
downsizing 634:10
635:6 636:23 638:18 684:22
downtown 717:18
Dr 617:8 618:5
dragged 727:4
dramatic 694:1 724:20
draws 664:11
Drew 694:7,9 696:5
Drew's 701:25
driven 630:12
driver 677:25
drivers 619:17 625:13,20
626:11,12 627:19
628:2 629:11 713:19
driving 637:16 649:7
drop 724:23
drop-off 628:25
dual-stream 628:7
due 628:23 629:24
637:22 681:18 684:3
684:22 690:5 710:6
duly 624:22 682:21 705:8 720:6
during 651:20 656:24 662:21,23 709:11
dwellings 639:25 640:1
dynamic 711:20
dynamically 716:11
\(\frac{E}{E 618: 1,1 \text { 619:1,14 620:1 }}\) 621:2,2
each 623:13 626:5 631:19 633:14 635:4 713:18716:6
earlier 674:13 702:1,14
709:19 717:5 720:13
early 662:21
earn 658:5 663:14
earning 669:22
ease 625:17 643:1
easiest 688:7
easily 723:6
economic 692:25
education 629:15 653:3
673:25 687:22 688:15
effect 654:13 655:6 667:14711:15 720:23
effective 632:1
effectively 645:14
efficiency 716:6,19,21 717:22 721:7,8
efficient 716:13,14
efficiently 711:17 713:14 713:20 716:8
effort 687:21 689:5 692:5 693:11 700:21
efforts 622:2 690:3,11 693:11,25 713:15
eight \(653: 12\)
either 632:2 634:9 641:9 676:7,20 684:13 686:8 687:8,15 692:6
El 653:11
Electronics 715:9
element 694:5
elements 701:18 707:4
elevator 691:24,25
elevators 688:24
eligible 674:14,25
eliminate 645:16
Embarcadero 618:14
employee 729:12
end 630:10 633:12 645:5 650:6 686:17 702:17 715:2
Ending 728:14
engagements 668:16 enjoying 654:24 727:6,7 enough 659:16 676:14 ensure 622:16 627:5 656:21
entail 629:8
enter 683:12 718:22
entire 621:24 626:9
669:24 671:10 672:8
entirely 723:14
entirety 626:3 633:22
entities 668:22 669:6 680:16
entitled 655:15 683:15
entity 658:3,4
Environment 618:6
621:14 674:8
equal 622:9 675:4
equally \(712: 7\)
equal-size 687:2
equation 671:6
equipment 657:17 696:20
equitable 622:9
equivalents 655:2
error 724:6
errors 724:9
especially 694:22
Esq 618:13
essentially 633:1 650:23 651:19 653:21 687:7 716:8,10
established 658:18 666:22 668:2 726:15
establishing 661:18
et 666:17 697:12
evaluate 704:8
evaluated 643:17 644:15 670:1
evaluates 710:24
evaluating 646:22 707:3
evaluation 623:2 627:5 647:3 707:20
even 643:13 646:2 648:10 651:16 662:23 707:23 717:15 720:12 721:1,11 722:25
evening 671:8 710:3
evenly 647:25 648:8,15
event 724:19
every 647:18,19 691:23 707:6
everybody 682:7 726:20
everyone 621:5,22 622:12 728:10
everything 627:1 663:8
evidence 621:19 623:9 624:5 625:21 631:13 632:20 639:15 643:5,9 649:9 683:21 684:4 690:18,21 706:13,20 710:18
exact 654:16
exactly 630:25 647:1 662:9 678:8
EXAMINATION 619:3,4,4 619:5,5,7,8,9 625:1

652:16 670:15 674:9 675:9 682:23 700:8 706:22
examine 721:25
examined 624:23 682:22 705:9 720:7
example 672:21 691:6 699:20 708:6 716:13
examples 687:8,14 689:12 690:12
exceed 685:20
except 707:23 716:11
exception 627:14 635:8
excess 695:2,3 702:13
exclusive 714:22 715:7
exclusively 626:24 715:10
excuse 697:2
executed 719:17
exhibit 623:21,25 624:3
624:4,7,15,19 625:15
625:18,19,20 627:11
630:24,24 631:9,12,15
632:7,12,14,16,18,22
637:4 638:2 639:9,12
639:13 642:23 643:1,3
643:4 649:14,16
653:19 657:15 659:22
660:17 662:10 674:19
683:3,6,15,19,22
684:18 690:14,17,19
690:24 691:19 694:4
705:17 706:10,11,17
706:18 708:3,22 709:9
710:16,17,20 711:23
exhibits 625:6 705:12 720:1 722:9
exist 687:14
existing 628:14 685:18
713:15
exists 625:15
expand 701:8
expansion 703:4
expense 656:24 662:5,5 676:12 680:4 696:8,11 702:25 704:3
expensed 658:12
expenses 623:3 625:11 625:25 626:7 694:11 694:16 696:14 702:7
expensing 659:4 660:21
experience 626:20 627:7
632:1,4 634:15 647:22 650:9 664:1,14 678:15
experienced 646:13
689:15,19 693:5
experiences 647:20
experiencing 645:4,6,12 645:17
experiments 666:17
explain 629:23 633:7 663:5
explained 630:3,6 668:10
explanation 661:13,16
explicitly 661:4
explore 670:18,24

\section*{710:21 711:4 720:18} 721:10 725:23
explored 671:1 725:14 exploring 716:24
extent 663:6 677:6 695:25 709:23 722:21 723:13
extra 634:22 655:6
extracted 642:24
extraordinarily 692:20
extremely 717:17
e-mail 684:13
F \(\quad\) F
facilities 659:3 675:24 676:8,17,22 677:11 678:3,19 679:1,9,24
facility \(675: 15\)
fact 641:18 650:2 667:17 672:9 677:25 692:12 721:8 722:15
factor 698:5 699:4,11 716:21
factors 626:15,15 629:13 677:12 694:24
facts-and-circumstan... 703:16
fail 666:17
fair 636:2 648:17 676:14
fairly 649:2
familiar 675:25
family 654:1 674:25
far 633:20 646:16 676:6 688:12 714:1,18
fascinating 685:12
favorite 698:10
fee 646:22 666:21,25 668:1 670:4 678:9 679:25 680:4,8,21
feedback 692:17
feel 693:24 724:25
fees 663:15 680:13 719:13,14 725:20
few 649:12 705:12 707:13 720:25
fewer 638:10,11 641:16 707:7
field 627:8 652:25 653:1
653:6 708:17 710:4
figure 627:21 644:20
figures 643:7
FILE 617:25
final 621:16 623:11 642:8 650:14 684:3,6 685:23,25
finance 618:3 653:3
financed 662:5
financial 623:1 627:3 660:8 676:2,6,21
financially \(729: 13\)
financing 656:25 657:11 657:21,25 658:13 659:2,8,10,23 660:21 661:7,14,21,25 662:3
find 622:19 647:9 700:23 finding 647:5 701:18
findings 685:12
firm 663:24
first 623:17,18 624:22 632:23 634:25 643:15 656:18 657:16 659:25 688:6 703:3,17 708:5 711:22 718:23 720:6 720:16 724:8 726:4
fiscal 708:4,5 713:10
five 638:3,8 669:14
672:11718:16 727:2
five-unit 640:7
fixed 631:17 635:13,16
635:18 641:4 642:19
645:23,25 648:13,18 649:6,10,16,24 650:2,4 650:6,23 651:19 652:5 673:10 702:3,8,12,22
723:2,4,8,12
flavor 698:11
floor 618:15 691:23 692:24,24
floors 689:2
focus 621:16 632:22
689:17,19 701:21 712:11
focused 687:21 700:21 712:8 713:2
focusing 656:8
folks 634:18,21 635:25 636:17 637:15,21 642:2 651:12 655:19 662:1,17 671:10,11,21 692:1 714:25
follow 675:13 679:21 705:18
follows 624:23 682:22 705:9 720:7

\section*{follow-on 646:5}
follow-up 701:23 705:3
forecast 666:5
foregoing 729:6,9,15
foremost 688:6
form 625:16 644:21 684:8
Formalities 720:8
format 671:13
forms 622:20 684:12
formulas 650:4
forth 672:19 729:8
forward 621:22 666:23 698:19,23 718:21,24
found 627:16 646:24
foundational 708:19
four 639:24 640:7,14 644:24 653:10 655:6 669:14
four-hour 713:25
four-unit 672:22
Francisco 617:1,9 618:5
618:8,15 621:7 622:9
626:4 633:24 635:21
650:17,20 665:15
668:21 669:2,21 680:1
680:3,10,22,22 \(681: 6\) 681:10 685:14,17 710:7 712:8

Francisco's 681:9
frankly 685:12
frequently 691:14
Friday 712:2
friend 725:21
from 621:13 622:25
623:4,14 627:1,20,24
628:7 633:1,4 634:25
636:5,23 637:10,14
638:18 640:12 642:18
642:19 643:8 653:6,13
656:5,21 657:3 660:15
660:18 661:13,17,19
661:20 662:1,17 663:4
664:18 666:15 668:22
671:7 672:3,19 673:7
673:12 674:7 677:11
678:23 680:13 685:16
686:13,23 692:17,24
692:25 696:1 701:9
702:19 708:7 711:5,19
712:1 713:8 716:17
717:16,23 719:5
724:20
front 649:21 697:16
frontier 701:10
front-end 691:7
front-load 703:7
full 689:20
fully 642:23 679:8 700:18 703:8 725:14
fun 726:10
fundamentally 671:2
funding 693:14
further 626:18 634:4,24
636:22 640:3 641:21
642:5 648:15 660:7,23
661:18 662:25 663:1,5
670:11 721:9 729:11
Furthermore 723:15
future 660:12 665:24 667:22 669:13 677:13
677:14,18,20 723:24
725:23 727:18,20,25
G
G 621:2
gained 662:25
gaining 714:2
gallon 686:7
gallons 631:18,19 655:7
656:1 726:21 727:1,1
gamut 686:22
gap 648:2,5,8
garage 691:9
garbage 628:7 665:8 726:5 728:1
Garth 618:16 619:3 623:20,24 624:21 720:14
gate 626:5 650:18
668:20 678:2 683:3,15
gave 657:11
general 663:25 672:16
686:22 722:20 723:10
generally 663:24 664:9
671:20 672:1 675:20

679:10 683:9 708:10
709:14 710:7 714:25
generate 698:1 727:5
generated 724:17
generating 727:3
generation 638:18
generator 648:3,4
generators 634:17
635:19 645:20,22 648:16,19 671:21 721:9
Gentlemen 682:25 geographically 716:4
getting 628:9 635:15 639:18 673:1 684:11 686:19 701:9 721:22 721:23 726:25 727:9 727:11
Gigantic 723:10
Giusti 692:16
give 681:22 685:6 686:20 687:8 690:5 716:13
given 630:18 647:11,22 651:15 667:17 681:5 725:2,2,22 726:13
gives 687:11
giving 677:3
go 625:14 626:18 639:8 642:20,25,25 643:14 652:2 655:8 663:4 671:5,11,11,16 672:18 672:22,24 673:8 674:3 683:11 689:1 691:12 692:1 704:20 711:18 711:19,24 721:3,19 726:14 727:17
goal 686:15 725:5
goals 630:19 685:11 721:8 727:8
goes 632:8 654:17,19 679:10 691:8 709:3 713:11 716:22
going 625:5,9,14 629:7 630:22 632:1,3,4,10,22 634:15 636:9 641:25 642:24 649:14 656:1 658:22 659:15,19 666:23 667:6 669:3 671:25 673:9 682:15 688:11 691:18,21 696:6 698:24 699:18 702:16 703:21 705:13 705:15,22 706:1,24 708:20,22 709:23 710:13,14 711:24 712:10 714:4 721:4 727:22
Golden 650:18 668:20 683:3,15
gone 625:17 629:22 688:14,15 693:9
good 621:5 625:3,4 627:17 652:18,19 661:22 662:9 663:10 669:25 670:17 675:11 691:6 705:17 719:2 720:11 728:1

Goodlett 617:8 618:5 gotten 692:16 governments 653:4 graph 644:21 graphically 645:1 gray 705:22
great 642:16 692:5 709:23 724:24,25,25 725:4
greater 632:4 638:16 667:7 694:25 703:21
green 630:1,9 691:20 705:22 719:9 722:6 723:16,19,23
grounded 626:17
group 626:23,24 634:15 638:3
grouped 630:25 grouping 633:19 groupings 631:7 633:3 groups 694:21 grow 648:5,7 growing 648:15 grows 648:9 growth 628:23 629:1,5
guess 667:6 672:15 693:8 709:25 715:20

H
H 619:14 620:1
habits 671:17,18,20
Haley 618:7 619:5 674:6 674:7,10 675:8
half 644:7 652:24 717:22
Hall 617:7 618:4,10
hand 664:12,13 691:25
handing 690:7,12
handle 676:22 691:4 714:16
handled 667:21 687:25
handles 667:1
handling 651:10 668:6
hands 718:14
happening 635:11,21 673:2
happens 709:24 711:15
happy 701:7
hard 706:25
harder 700:23
having 624:22 637:20 650:9 667:3,20 669:23 670:3 679:6 682:21 705:8 717:11 720:6 726:25 727:10
Hay 668:22,25 675:23 679:25 680:7,12,20 727:14
hazard 693:8
hazardous 651:8 692:5 702:21
head 628:18
health 626:14
hear 621:17 662:22 698:25 700:24
heard 642:17 694:7 702:6,14
hearing 617:3 621:3,9,10

621:21,25 622:12,17 623:11 624:10 627:12 675:13 680:25 699:25 728:7
hearings 621:17 623:12 656:24 662:21 665:14 690:9
heavily 717:19
held 722:5
help 664:8 706:25 713:7 714:5
helpful 653:18 661:17
711:21 721:13 724:3
helps 645:25
her 623:17
HHW 673:12 723:10
Hi 726:3
high 645:6,11 670:20 684:25 697:14
higher 645:17,18 648:4,4 648:9,18 663:20 664:4 671:24 675:18 677:5 723:20
highest 708:10
highlight 703:17
highlighted 634:13 635:3
highly 692:25
high-level 628:1 715:24
high-risk 675:18,19
Hill 691:22 727:14
him 720:4
hindrance 714:1
historically 689:16
history 658:20,21
hole 665:8
home 656:1 679:6
homes 653:21 654:1,12
hope 700:23
hopefully 673:23 704:17
Hour 620:4 706:16,19
hourly 711:4
hours 651:20,21 696:19 696:20 709:18 717:3,5 717:9
household 651:8 692:5 702:21
housekeeping 624:7
I
ice 698:11
idea 671:16 686:21 722:20 727:19 728:1
identify 690:5
illustrate 711:2
image 714:5
images 710:21 711:3
immensely 726:5
impact 635:10 645:16 646:25 677:21 691:15 696:2
impacted 633:4 717:20
impacts 619:19 632:9,16
632:18 638:9 647:2
694:2 703:9 717:12
720:22
implementation 629:8
629:12,13 630:11

653:2 654:16
implemented 722:25
important 687:17,20,23
727:23
impressed 724:1
impressive 653:17
improvement 716:15
iMRF 659:1
INC 617:21
incentive 725:9,12,16
incentivize 721:1
include 624:16 639:2
661:24 666:25
included 624:10,13
627:15 636:4 644:9,12
645:15 650:1 657:8
665:13 675:3 676:13
685:22 686:16 694:16
694:18 695:6 722:2,10 727:16
includes 628:24 632:12 658:24 668:14
including 621:19 624:15
627:2 628:19 645:23
648:11 653:4 658:2
668:1,7
income 648:7
inconsequential 695:14
inconsistent 659:11 661:23
incorporated 680:3
increase 619:17 621:11
625:20 627:20,22
628:15 630:4 631:24
632:1,5 634:16 636:21
641:9,20 642:1,10,19
645:4,7,7,17,24 646:12 646:16 647:8,17,20,25 648:6 649:7 669:11
678:1 680:7,21 681:9
686:12,13 687:1
693:23 702:9 703:1
720:15 721:24
increased 665:17 669:22
670:21 673:18 677:23
681:23 702:19,24
increases 628:23 629:13
629:14,15 631:16
635:1 638:14 644:19
645:12 646:18 648:2
678:2,11 720:23
722:23
increasing 641:25
651:16 664:9 678:20
678:24 680:13 687:5
687:10 702:15 723:23
incur 635:13 659:10
Indeed 623:20
independent 716:1
indicate 633:15 640:23
indicated 633:2,20
657:24 674:13 694:10
indicates 633:7,15 643:19 680:17 686:10 726:12
indicating 633:12 640:14 677:15
indication 658:16 674:22 694:8
indicators 658:10
individual 626:7 640:15
inducement 664:5
industry 635:21 647:22 650:13 665:4
inflation 698:5,13,14 699:4,11
information 622:18 626:16 633:1 639:21 640:11 653:18 654:3 662:16 676:20 677:15 701:25 706:1 714:2 724:15
infrastructure 651:5,17 651:21
initial 707:7 708:25
innovation 666:9 681:19
instance 652:3
instead 696:7 714:1
720:20 727:20
institute 690:11
insurance 626:14
integrate 671:12
intend 681:25 718:18
intercompany 658:3
interest 662:4,5
interested 714:9 717:4 729:13
interesting 691:17 711:8 714:18
internal 693:11
internally 645:19
interrupt 691:18
introduce 623:25 625:14 626:19 630:23 639:9 642:25 705:12 706:1,5
introduced 623:22
627:10 643:9 661:2,15 705:19 720:1
introducing 632:7
inversion 714:18
invest 664:3
investigate 639:22
investing 677:4
investment 676:7,17,19 700:21
investments 629:18 662:6,8
investor 675:17,25
investors 675:23
invite 623:20 652:11
involved 622:17 653:2 675:22 676:3,15
involves 689:5
isolation 694:21 703:19 704:12
issuance 660:14
issued 621:14
issues 699:16 715:20 725:15
item 672:18 696:24
697:2 702:22,23
704:21 707:9 711:9
712:19 713:6 714:20
714:25 716:7
\begin{tabular}{l} 
items 650:3 652:1 \\
\begin{tabular}{l} 
699:20 702:8 720:13 \\
\(728: 9\)
\end{tabular} \\
\hline J
\end{tabular}

\section*{J 618:13}
janitorial 689:1
January 683:4,18
job 687:5 701:20
John 618:17 619:7 662:18 682:16,18,20 689:21 705:2,6
joined 653:7
Jose 618:4 622:7 624:24
Julia 618:3 623:18
July 708:7 712:1
jump 659:19
jurisdictions 647:24 648:21 650:9 668:18 679:5
just 625:12,17,23 628:11 631:7 632:13 636:5,10 637:16 639:6 643:1,20 643:25 644:24 645:20
646:6 647:17 649:12
650:8,14 651:3,22
655:24 663:17 664:13
670:17 672:15 673:15
674:11,18,20 679:21
680:23 681:16 682:2
683:9 688:9 689:7,25
691:3,18,18 692:13
694:18 695:16 697:5
697:21 699:10 700:23
701:1,4,21 702:12 703:17 704:15 706:4,4 708:6 712:5 715:5,24 716:17 717:9,19,22 720:3,22 721:4 722:12 723:6 724:17 726:10 728:10
justification 660:7,20 justifies 661:3

\section*{K}

Kate 618:14
keep 636:18,25 642:4 645:25 651:17,19 655:5,15 656:2,9,12 659:18 672:4 681:3
keeping 709:9 716:1 726:24
kept 644:7 721:10
kind 625:24 626:19 635:11 638:2 642:20 644:20 646:6,7 647:5 647:16 649:18 650:14 651:25 685:20 686:24 688:1 689:13,19 701:13 703:23 706:24 707:12,23 708:15 709:16 710:11,22 711:2,4,5 714:13,14,17 714:20 715:13,18 716:23
know 626:15 630:10,11 645:9 647:15 649:25

654:15 656:23 658:24 663:15,22 664:11 665:13 666:6 671:18 671:18 675:21 676:7 676:25 677:6 680:14 680:16 686:23 689:12 692:7,16,23 693:3 695:11 696:12 697:10 697:14 698:8,15
701:20 703:15,22 705:2 706:25 707:25 710:16 711:23 714:12 715:25 725:2 726:13 726:15,18 727:25

\section*{knowing 693:24}
knowledge 660:19
661:15 663:25 669:5
known 726:20
L
la 693:23
labor 696:20 723:4,5
lack 667:22
laid 629:16 658:14
landfill 628:5 630:3,5
664:12,19,23 665:1,21 671:21
Landfilling 665:8
landfills 677:11 678:15
large 627:22 642:15 657:5 658:25 687:12 687:15 693:9 702:2,12 702:24 703:6 722:23 722:23
largely 635:19 665:2
702:22 716:12
larger 634:15 635:19
637:8 638:14 640:4
641:12 667:8,15
671:20 688:12 689:23
704:10,18
largest 636:8 639:24 647:7 685:13,17 686:11 688:20 694:1
last 623:12 624:10
627:11 628:20 642:17
643:9 660:3 694:7
700:13 711:3 727:2
728:5
lastly 696:23
late 710:3
later 673:23 708:20
724:6
later-shifted 709:17
laws 729:15
layer 695:9
layering 694:18
leader 635:22
leading 663:1 707:13
leads 712:14 716:23 725:7
learn 705:12
lease 656:18,20,25 657:4
657:11,20,24 658:12
658:16,19 659:2,23
660:21 661:7,14,21,25
leased 658:22
leases 658:7 660:9
leasing 658:3,4,18,21 660:11 662:2,4
least 625:23 642:20 644:15 699:23 707:6
leave 637:25 659:14 704:25 705:2,6
left 633:4,20 640:2
left-hand 631:22
legislative 678:21
less 634:7 635:7,7637:6 640:17,18,19 641:1,20 656:11 693:19 703:1 707:24 714:19 716:13 716:13 721:22,23
let 621:3,7 622:24 645:9 653:16 655:24 656:14 663:11 690:23 710:15 718:23
letter 660:15719:5
letting 671:5
let's 627:19 630:21 637:25 644:18 649:5 663:17 664:13 690:24 696:5 698:4 705:13 706:4
level 640:25 645:4 651:5 667:13,14 668:9 670:19 675:5 676:10 687:11 703:19710:2 713:25 725:16,22
levels 636:19 637:20 651:16,16 689:2
lieu \(715: 1\)
lifts 721:6
light 708:2
like 621:25 623:16,20,25 626:14 628:4,24 630:24 631:20 632:6 639:5,8 642:20,25 643:14 644:21 645:20 647:16,19 649:12,13 650:8 651:8 652:9,11 652:12,15 653:4 654:10 660:5 664:8 670:10 671:9,17 679:17 682:12 683:2 689:10,21 699:21 700:10,17,23 702:21 703:1,17 704:16,22,24 706:2 707:18 709:7
710:6,11 711:3,5 713:6
713:11 714:24 716:25
716:25 718:4,10,19
723:11 724:23 726:19 728:10
liked 628:17 665:7
likely 629:4 697:17 702:25 723:25
limit 720:22
limited 630:17
limits 702:20 710:4
line 626:5 646:17 650:3,7
lines 626:7 705:20
linked 628:4 629:9
list 728:9
lists 719:11
literally 691:14
little 627:19 628:16
631:22 632:6,10 639:5
644:18,22,23 647:21 647:23649:5,6 663:18 664:14 675:3 687:5 688:25 698:10 700:18 700:24 712:16 713:7 714:14717:8
live 686:25
LLP 618:14
loader 697:17
local 653:4 678:21
located 703:11
locations 697:10
logical 626:9 627:6
long 652:22 659:16
689:9 699:5 709:8,25
717:15726:13
longer 637:11
look 627:21 630:8 639:4
639:5,19 643:11
644:21 649:18 653:19
655:21 659:21 660:3
672:23 675:2 678:25
694:21 696:7 703:18
707:17,18,22 708:7
709:7 710:5 711:2,5
712:21 715:25 716:25
716:25 717:3,25
719:11723:12
looked 639:23 643:24
644:3,6,8,10,20 645:1
646:11 650:1 709:6
looking 626:7 630:19
635:23 639:6 657:14
672:18,19 674:18
678:5 689:22,22 695:5
707:11,25 708:21
710:12,24 712:6 713:9
714:3,9 716:3
looks 660:5 671:17
679:17 706:2 713:11 714:24 724:25
lose 666:18
loss 676:16 684:21
700:12 727:22
lost 667:9
Iot 625:6 642:17 689:5 691:3 714:8 717:18 721:13 723:3,4 727:3,5
lots 705:20,20
Iow 636:1
lower 638:15 648:3,3,9 648:16,17 671:25 708:11
lowest 708:12 723:18
low-waste 645:20,22
\(\frac{\text { M }}{\text { made 657:20 688:5 }}\)

689:17 692:18 693:3
702:11 703:3,17 708:1
main 641:12 646:9
major 619:20 626:11
639:11,13
majority 723:8
make 622:1 627:12 661:8 663:3,8 676:25 677:7 690:15 691:7 693:18 695:16 706:4 708:1 719:10,15 725:9
makes 626:10 659:13 663:23 703:23 710:4 722:22,25
making 621:19 626:8 635:23 667:10 689:6 693:10 701:4 727:7
manage 636:24
managed 650:10 692:14
Management 624:2
manager 618:7 653:11 689:10 691:10
managers 692:17,21 693:15
managing 669:19
mandatory 637:10,17 672:3
Manu 618:9 632:13
many 635:22 641:16 645:3 647:24 648:21 666:3 688:18 693:5 717:24
map 711:22 712:18,22
maps 711:1 714:8
March 624:1
margin 663:20 667:8,15
mark 618:17 619:7,9
631:8 632:13 682:16 682:18,20 700:19 704:23710:16
marked 639:12 660:17
market 618:7 658:8 660:9 714:23
marketplace 629:25 658:10
marking 691:19
match 722:24
matching 709:16
material 630:5 636:5,24 649:11 651:3 689:3 691:12 692:11,12 708:13 714:19 \(716: 18\) 718:19 720:9 721:5
materials 629:22 650:25 668:6 673:5 679:7 692:5 699:21 705:14 707:5,9711:11,13,22 712:25 713:5 717:6
math 626:9 674:16 697:14 715:3
mathematical 626:8
matter 624:6 661:19 698:9,11
matters 626:25
Mattress 715:9
mature 664:19 665:12
MAXIMILLIAN 617:24 729:4,21
maximized 679:8
may 623:11,13 651:10 654:18662:16 671:4 677:4 683:1 692:15 696:18 698:25 700:22

705:10 712:15 728:7 729:17
maybe 662:22 681:15 682:6 690:4 700:17 714:9 717:8,10
MEA 715:9
mean 627:24 669:2 671:20 681:15 694:15 699:5 704:11 712:4,12 725:11
meaningful 725:12
means 654:22 667:14 686:6
meant 628:1
measuring 698:13
mechanism 662:1
meet 685:11
meeting 643:9 728:11
member 623:22
members 618:19 705:18
memo 624:2
Memorandum 619:16 624:4
mention 659:25 727:24
mentioned 635:12 672:2 690:7 693:2 703:3 716:25
met 658:13
method 688:7 692:11 699:9
methodology 650:2 657:6 671:12 698:15 698:22 699:3,8,11,12
metric 704:18
Michael 618:13
microphone 621:23
middle 644:14 717:21
midpoints 643:24
might 639:5 666:6
670:10 675:2 677:21
695:25 708:1 710:5
711:7,21 714:5,16 715:5,5 717:7,12,17 720:22 727:19
migrate 636:14
migration 637:10,17 685:1,2,4,5,9,11,19,25 686:6,13,18 689:16 693:19,22 700:12
722:11
mind 690:23 722:23
minimal 651:9
minimum 671:23 697:20 721:15,18,22,23 722:4 722:5,6
minute 698:24 706:1
minutes 707:13 718:16
Mission 712:11
mitigate 635:1 673:18 717:12
mix 633:6 641:15 646:13 646:16 654:4
mixes 619:20 633:3 638:10,10 639:11,14 639:23,24,25 640:3,7 646:19 721:14
Mm-hmm 714:7
model 626:6 633:2 670:22 697:6 modeling 724:2 models 628:17 moderate 665:3 modify 648:24
Mohammed 618:2 621:5
moment 683:14 724:5
Monday 712:1
Mondays 708:9
Monday-through-Frida... 712:3
money 666:18 667:9
month 637:1 641:21,25 642:10,17 654:5
monthly 619:18 631:12 634:1,2 639:7 640:11 640:14,21,22 655:19
months 708:7
month-to-month 651:11 658:17
more 630:14,21 631:1 632:7,10 634:7 636:2 638:9,14 639:7 640:25 642:23 643:13 644:18 645:8,23 647:16 648:19,19 649:5,7,12 656:15 661:3,10 664:19,19,24,24 665:10,12,24 668:10 673:10,14 687:5 691:11,13,17,17 693:19 694:8 695:8 699:25 700:18,24 701:8,11,19 702:18 703:20 709:11,14 711:20 712:16 713:2 713:13,20 714:19 716:18,22 717:8 722:18,20,21
more-than-one-unit 632:11
morning 621:5 625:3,4 652:18,19 670:17 675:11 709:3 719:2,3 719:18
most 641:14 646:6 648:10 649:1 687:23 688:7,23,23 692:1,12 694:1 698:12 715:17
motivate 664:2
motivated 687:19 692:25
move 630:16,21 635:12
638:1 639:8 642:3 645:23 672:15 692:23 698:18 705:23 708:22 710:11 714:4 718:13
moved 637:12
moves 631:25 686:8
moving 623:24 655:23 656:5 685:16 692:11 698:23 720:13 723:17
much 637:16 644:1 646:24 672:11 676:25 685:10 690:1 691:11 703:12 704:6 711:12 712:3 716:12 723:22

723:23 725:7 726:1 728:13
multiple 633:16 671:22
multitude 697:3
multi-unit 636:11 639:18
640:1,14 641:7,11 642:14 673:3,17 721:21
multi-units 672:10,14,15 673:8
municipal 626:24 municipalities 679:4 must 704:2
muster 657:25
myself 627:9
N
N 618:1 619:1 621:2 name 718:21 719:2 726:3
namely 658:25 664:23 694:5 699:14
name's 675:11
narrative 650:16
natural 628:23 629:1
nature 696:13
near 665:24 691:25
nearly 646:10 712:5
necessarily 673:2 721:3
need 651:5 652:2 659:10 660:7,20 675:2 685:15 689:8 692:13 696:1 697:10 699:1 701:11 701:21 703:9 704:17 714:21 718:18 720:2
needed 647:18 662:3
needing 716:23
needs 660:23 661:10 707:25 717:8 724:10
negotiate 669:5 681:2
negotiations 727:18
Negron 618:18 619:9 704:22 705:7 706:24 708:15,18 713:6,9
new 625:15 628:5,6 629:8,13,17 630:12 631:6 632:14 639:9 640:21,22 655:4,19 659:1 666:11 673:1 693:16 694:5 695:17 696:6 701:25 702:18 705:12
newer 664:25 691:2 next 628:13 629:7 659:16 680:8 681:4 699:19 700:1,2,5 707:13 708:22 711:14 717:1 719:23 722:18 725:25 727:22
nice 712:25
night 710:9 717:18 non-application 658:2 northeast 710:25 712:9 714:10,17,22 715:11
notable 647:3
note 638:17 657:23 700:19 724:14
noted 657:19 700:10
notes 655:21 729:10
notice 634:13 637:4 712:5
noting 690:6
notwithstanding 721:8
number 619:20 633:8,9
633:25 638:11,16
639:11,14 640:9,13
643:16 645:6,11,11
646:7 647:7 653:14
654:13,25 672:7 675:3
675:5 689:4 694:5
701:25 704:10,18
721:19
numbers 685:24 710:10
722:12 724:11,17,25
Nuru 618:2 621:3,5
622:23 652:8,10
670:13 674:3,7 679:16
682:4,11,15,18 683:1
704:20 705:10 718:3,7
718:12 719:22 720:4
725:17,24 728:3
0
0

O 621:2
obvious 722:18
obviously 691:8 692:3
occasion 721:15 occur 677:18 681:8 occurred 665:16 677:18 occurring 666:10
Off 682:9
offer 623:6 652:9 683:2
offered 637:12 638:24 664:4
offering 697:17
OFFICE 618:9
officially 683:12 728:6
offset 698:2
off-hours 710:5
often 664:8 671:21
okay 621:3 627:10
628:13 629:7,18
630:21 631:11,15
637:25 638:4 639:4 642:12,16 646:5 649:5
650:14 652:6,8 655:18
655:24 663:25 672:2
672:17 673:22 674:3
675:2,8 678:8,13
679:16 682:4,6,17,18
684:19 685:5 698:24
699:4 701:23 704:11
704:20 706:24 707:2,3
708:19 709:5 713:4
718:1,3,7,9,13,16
old 624:16 631:6
older 691:3
one 627:3 631:7 632:23
633:14 634:13 639:12
644:8 647:2 648:2
650:14 655:13 661:23
663:11 664:12 667:21
669:6,8 674:11 676:20
677:12,13 678:14

680:16 681:21 686:7 687:13,15,18 688:4
689:20 691:18 694:24
697:16,19 700:1,25
702:11 705:16,20
706:5 707:20 708:24
709:16 713:18 714:8
721:6 723:5
ones 631:21 641:17 666:6 727:3
one's 691:17
one-unit 632:9 633:12 637:25
one-units 638:5
online 695:18 704:2
only 624:12 648:15 657:6 673:17 674:24 685:15 691:6,14 696:8 698:18
700:14 706:16 712:2
726:18
open 651:19 659:18
662:12 667:21
opened 725:21
operate 651:3
operates 650:17
operating 665:17 675:15 677:5 681:22
operation 667:25 668:11 669:11 681:19 717:3,5 717:10
operational 627:2
664:23 713:8 714:13
operationally 715:1,22
operations 650:10,11
653:2,8,10 664:24
666:8 667:2,19 677:6,7
677:17 678:11 681:9
opinion 635:20 657:12
661:4 663:24 668:8,15 695:9 698:16
opportunities 715:4
opportunity 623:6,9 642:3 652:12 669:12 688:20 689:23,23 701:10,15 704:8 713:13
opposed 654:2,12 659:4
opt 656:3,11
optimal 647:11
optimizing 634:8
option 636:14
optional 622:14
options 641:21 644:14
opt-in 656:5
orange 630:9
order 621:4 622:24 639:22 640:13 659:9 668:2 685:11 686:15 703:8 711:23 720:16 727:15
orders 620:3,4,5 706:7 706:12,19 710:18,23 713:4
Ordinance 640:20
organic 629:22
organics 641:19,23 668:25 671:23 676:23

677:11,17 679:3
688:19 725:20
organized 652:15
original 667:7
originally 657:8 712:17
other 622:18 625:7
628:12 629:12,15 633:14 634:11 635:17 635:22 636:3,6,8 638:1
641:8,15 642:13,15 644:3,6 645:1 649:4 650:8,8 651:6 657:10 657:17 658:4 659:12
663:11 664:13 667:12
667:19 668:4,17
671:22,23 673:6,12,15
678:14 679:16 680:16
681:1,13 682:1,4
687:11 688:22 689:1
691:16 692:4 694:4
697:22 699:16 711:1,4
712:12,13 713:3
715:13,14 716:6 718:9 721:15 725:8 727:24 728:4
others 651:9 667:16
out 624:8,9,16 629:16
636:7 638:9 641:8
642:15 646:17 650:7
655:5 656:3,11 658:14
673:5,16 679:2 688:14
690:7,12 692:1 700:13
705:17 708:16 709:9
711:18 724:6 726:22 727:5
outcome 644:24
outcomes 643:12
outline 622:24
outlined 633:5 650:5
outreach 629:14 653:3
673:25 687:10,22
688:1 689:5 690:11
693:15 701:13
outside 668:6 675:12
over 628:11,20 631:21
632:8 641:5 642:17
651:14 655:11 665:11
685:19,19,21 686:3,4
686:13 689:16,24,25
694:6 702:24 722:25 725:4
overall 626:22 627:5,13 627:17 629:2 635:7,12 635:16,24 636:9,20 637:23 638:7,10 640:4 640:8,18,19 641:13
642:14 644:2,10
646:11,15,20,20
651:10 655:23 656:4
680:4 723:18
overhead 690:24 696:21 697:23
overlaid 712:24
overlap 712:25
overlay 712:18,22
overview 625:12 628:1
own 650:9 668:7 702:1
owner 689:10 701:15 o'clock 709:20 711:18 717:17 728:8
O.R 663:14 667:14 669:22,23 670:3 725:22
\(\mathbf{P}\)

P 618:1,1621:2
page 619:2,15 620:2 639:12 643:15 653:20 657:15 659:25 662:10 662:13,14 684:17 694:3 698:4 724:7
pages 617:14 642:24 643:2 659:19
paid 668:7 680:22
paper 624:9 705:20 paragraph 660:4
parameters 681:5
pardon 656:10
parking 688:18 691:9
part 626:2 630:1 637:21
643:10,17 666:22 671:6 680:4 684:1 693:14 712:9,13 714:10
participating 622:12 728:11
participation 622:4,13 622:15 628:14,24,25 651:8,15,16 673:11
particular 624:9 632:9
636:16 648:22 649:15 653:20 660:3 662:18 664:17 684:2,20 698:9 700:19 708:11 712:9 722:8,13 724:19
particularly 685:10
parties 729:12
partners 681:3
parts 711:1 712:6,9 713:2
pass 657:25 667:24 680:23 681:11 724:8 727:21
passed 624:9 680:24
past 661:24 665:3 684:2 689:16 701:16
pay 636:2,4 637:6 648:13 651:21 656:11 673:14 680:9 722:21
paying 634:1,2 648:17 673:3,6
pays 629:21
penalty 729:14
people 648:13 666:10 671:15 698:25 701:4 717:24 718:14 726:19 727:1,4
per 631:17 639:7 640:14 640:24 641:21 654:5 685:21 686:1 701:1,5 718:16 721:18
percent 646:12 689:20 689:20
percentage 619:18

631:12 633:25 647:18 684:24 685:1
perfect 704:19
perform 625:25 704:12
performed 642:21
perhaps 631:8 704:8 720:17 721:9 724:5 725:23
period 623:12 629:4 666:14 689:24 694:6 699:25 700:13 709:12 718:14 725:4
periodically 689:1
perjury 729:14
person 662:18 718:16
personally 652:21,23
personnel 688:2
perspective 627:24 671:8 693:1 711:6 713:8
pervasive 713:1
per-dwelling-unit 643:23
per-tip 668:1 670:4
per-ton 630:5 677:22 678:9,10
per-unit 639:20 640:15
640:17 641:2 644:13
645:24 646:22,22 673:9
photo 691:16,19
photograph 619:23,24 690:17,20
photographs 690:13
photos 690:2 693:7
pick 713:21 727:10 728:8
picked 717:16
pickups 697:16 721:6
picture 692:7
pie 627:20 678:7
piece 649:6 678:7
pieces 657:17 705:20
pilferer 726:8
Pilpel 618:20 619:11 623:23 719:24,25,25 720:5,8 725:19 726:1
pink 713:21 716:5
pinkish 712:22
pioneers 654:22 656:9
place 617:8 618:5 622:20 639:24 640:8 671:3 727:18 729:7
placed 673:16 688:23 692:2 718:19
places 713:3 717:11
plan 651:4 714:13
planning 627:2 728:1
play 643:22 646:15
playing 645:15
please 621:3 622:5,20
623:18 626:19 631:10
643:18 698:7 699:1
718:21 719:23 725:25
point 635:22 650:14
657:7 661:17 665:4 666:3 685:7 696:7 700:13 702:11 703:17 709:9 725:8

\section*{pointed 624:8 655:5} 724:6
points 707:21
policy 630:13,18 647:11 656:22 668:15 719:12 719:17,17
popular 692:22
population 686:21
Porter 618:14,17 619:7 662:18,20 663:4 682:16,20 683:9,24 684:10 690:6 693:2,18 699:17 700:25 702:5
704:24 705:6
Porter's 701:24
portion 644:8 649:9,23 702:18
position 634:5 668:15 679:12
positive 692:20
possibility 669:20
possible 647:15 665:23
666:2 681:22 717:5
potential 636:22 664:4 702:10 710:24 717:3
potentially 634:10 637:1
638:19 641:22 661:23 681:2 700:22 710:22 712:10,16 714:10
practical 698:11
practice 661:24
Pradhan 618:9 624:1,14 624:19 625:19 631:4,8 631:11 632:15 639:10 643:2 690:13,16 706:4 706:9,14 710:15
preferable 698:15
premise 667:7
prepared 626:6 632:25 649:17 684:3 701:12
present 683:13 718:18
presentation 720:10 724:10
presented 626:6 677:15 724:9
Presently 716:6
pretty 630:6 646:24 662:9 710:2 711:12 721:25
previously 630:3 669:9 682:21 690:8 705:8
pre-planned 711:20
pre-route 716:22
pre-routed 716:7,16,19
price 653:25 655:11 672:20
prices 655:18 679:12
primarily 637:8,22 687:15 703:5
primary 639:23 641:17 688:5
principal 662:8
prior 623:12 635:16 641:10 644:25 658:19 668:5 700:13
private 653:8
probability 677:16
probably 631:1 673:22 687:23 688:20 690:6 694:20 699:23 703:7 724:17 728:1
procedure 681:1
proceed 622:5 623:18 705:10
proceeded 633:9,10
proceeding 675:23
676:4,16 678:1
proceedings 669:3 728:11 729:6
process 622:18 630:6 669:13 679:3 684:2 687:20
processed 650:25
processing 629:22
649:10 650:19 651:3 659:1 666:10,16,17 668:21 676:23 679:4 694:17 696:22 723:16 723:19,21
procurements 627:1
produce 636:25 651:12
produced 632:8 643:8
producers 671:24
produces 679:11
producing 635:7
product 679:11
production 727:25
productivity 716:15
products 679:11
professional 626:20 649:19
profit 658:3,5 660:10
663:20 664:4 666:25
667:8,10,12,15,21,25 668:7,9,11,13,14 670:3
670:4 675:18 676:25 677:6
program 618:7 622:10 628:25,25 629:12 635:18 651:7 654:11 656:4 690:9 705:14
707:5,10 712:20 713:18 715:1,14 716:1 716:19,21 719:4 725:11
programatic 628:6 629:15 678:21
programs 628:14 629:8 630:12 636:3,4 650:16 650:23 651:4,18,24 664:10 673:12,12,13 690:11 702:23 706:3 707:4 708:21 709:1 710:12,22 711:5,9 712:15713:13,25 715:21 716:14 723:11 725:10
project 626:3,22 658:21
projected 695:17 722:15 722:16
projection 694:5,9 695:19
projections 658:17
projects 658:25 660:22
promptly 682:8
properly 721:16
properties 693:3,4
property 689:9,10
691:10 692:17,21
701:15
proportion 702:2
proportionate 720:22
proposal 623:5 634:20 634:24 640:23 644:4 646:17 670:2,7 676:13 687:25 692:22 696:4 707:8
proposed 617:3 619:17 623:2 625:20 628:6,19 629:10 631:16 634:25 637:6 638:22 643:24 645:20 646:3,12 647:8 655:4 661:6 671:9 674:20 685:1 699:9 708:25 721:18,24 724:7,10
proposing 692:23
provide 622:15 623:9 660:6 688:2 704:7
provided 658:15 660:20 660:23 670:23 695:5 709:2,2
provides 667:18
providing 662:2 673:15
public 617:2 618:2,19 619:10,11,11,16 621:6 621:13,19 622:1,3,9,13 623:13,17,23 624:4 642:18 652:2 661:3,8 661:11 715:10718:14 718:17 719:1,24 726:2 728:6
Pujol 618:4 622:5,7,7,23 pull 643:7 691:4
purple 709:16
purposes 622:19 644:15
pushed 666:4
put 624:25 665:8,9 673:5 673:5 701:21,21 711:24
putting 688:16 690:23
Q
qualify 696:24
quantified 696:13 697:7
quarter 722:17
quarterly 722:11,14
question 647:16 657:1 659:23 660:18 661:22 667:6 669:25 672:6,13 673:23 675:17,21 683:25 692:15 695:8 701:19,23 703:24 720:14,24 725:1,5,22
questions 623:16 649:13 652:7 653:16 656:14 656:15 663:6,7 670:17 675:14 679:18,22 700:7 705:4
quite 642:15 678:4 707:20 712:8

raise 679:12
range 638:8 643:25
645:9,13 654:10,24
686:23 687:6 723:17 723:24
ranging 685:16
rate 617:4 619:19,21
622:17 623:2,5 625:9 625:12 626:4,17 627:5 628:2,6,19,20,21
629:21 630:5,20,22
631:2,16,24 632:3,16
632:18 633:1,4 634:1,2 634:5,8,16,22 635:1,6
635:12,17,17 636:17 636:21 637:6,13,15,16
637:21 638:13,14,18
638:23,25 639:7,19
640:11,14,22,22,23
641:20 642:1,5 643:4
643:10,12,17,23 644:4
644:16,19 645:4,7,7,12
645:15,20,25 646:12
647:8,18,25 648:3,3,4
648:5,10,11,14,23
649:7 650:8 653:3
657:4 660:12 661:25
665:14 666:13,15,22
667:14 669:13,15
670:18,22 671:9,13,13
671:25,25 673:1 675:3
675:13,22 676:13,16
677:19 678:1 679:24
680:25,25 681:4 684:2
684:3 685:20,22 696:2
697:6 700:13 701:14
702:4 707:8 713:10,11
720:15 722:2,16,19
723:2 724:21 726:11
727:16
ratepayer 618:12 623:8
623:14 642:18 670:14
671:16 705:3 718:7
726:7
ratepayers 618:11
648:17 671:4 680:23
696:2 726:11 727:21
rates 617:3 619:18
621:12 631:13 634:3
636:4 639:4 642:10,17
644:12,14,17 648:9,9
648:13,19 652:5 655:4
655:19,22 656:4,18,20
658:8,16,19,22 660:10
669:5 671:5,15 673:14
678:2 685:16 722:24
rate-setting 626:21
rather 689:20 694:9
695:18 699:19 709:25
721:6 722:18
ratio 644:4,6,7,9 675:15 677:5
rationale 657:8,10
ratios 644:6,10
read 706:25
real 650:12 712:14
realigning 722:24 realistic 725:1,7,13,15 realistically 635:5 651:6 really 625:6,9 626:15

628:10 629:9 630:15
630:16 637:13 644:7
645:19 647:10 657:5
659:15 661:15 668:1,8
668:12 687:16,18,24
688:4,10 689:14,18,19
689:24 691:6,14 692:4
693:13 697:12 700:14
700:17 701:22 703:8
709:20 712:11,21
717:19 721:21 722:1
723:13 725:6 726:21
727:6,9 728:2
real-time 713:22
rear-loader 715:8
reason 635:3 669:7 673:8 676:18
reasonable 626:10 627:6
650:22 661:1 694:8 698:14 704:10,18
reasonableness 656:21 661:18
reasonably-consistent 651:15
reasons 668:9 684:10
702:7 705:16
rebuttal 621:18
recalling 656:3
receive 634:21,22,24 636:17 640:16 654:2 673:7
received 640:12 673:13 676:21 692:19 710:24 712:1 713:5 719:5
receives 707:16
receiving 635:2
recent 658:20,21 677:24 678:16
receptacles 719:8,9,9,21
recognize 668:19
Recology 619:22,23,24
623:4,7 626:1,4,12 628:6,19 629:10,21 630:4 633:24 634:25 640:12 647:4 649:8,15 650:16,20 652:11 656:21 657:4,10 658:15 659:8 660:6,15 660:19,23 661:1 662:3 662:17 663:14 664:11 666:18,20 667:1 668:20 669:1,5,10,17 669:21 670:9,23 671:14 675:7,22 676:3 676:8,15,22 677:15 678:12 679:25 680:3 680:10,12,12,20,20,21 680:22 681:4,6,9,10 683:20 684:25 690:18 690:20 703:25 704:6 706:15 707:10,16 708:24 712:24 719:5

719:19 727:9,17
Recology's 621:11 623:3
626:3 627:16 630:19
631:16 633:1 635:11 639:17 640:23 648:14
650:11 658:3 660:11
661:17,24 663:16
682:12 684:20 695:18
712:19 719:12 724:7
recommend 661:12
recommendation 621:18
621:20 663:13 698:20
recommendations
621:16 627:13,15
682:13
recommended 660:11
668:17 694:11 699:2
recommends 684:25
reconfigure 691:10 719:19
record 621:7 661:3,9,11 682:9,10 683:12 704:7 718:19,22
recover 659:9 662:4
recovered 723:7
recovering 662:8
recyclable 637:1 692:13
recyclables 631:19
636:25 688:12,16
692:4 696:23 726:9
recycle 686:20
recycling 619:23,24
626:25 628:8,8 629:2
633:10 634:6,8 636:15
637:3,24 641:19,23
642:4,5 644:5 653:12
656:6 671:23 683:16
686:8,12 687:10
688:19 690:17,19,25
691:5 697:2 702:22
707:9 711:9 712:20,21
713:6 714:20,25 716:7
723:22
recycling/32 633:13
redemption 726:9
reduce 634:5,8 635:6
638:17 642:5 673:18 673:20,24 696:1
reduced 636:24 654:23 669:23
reduces 721:7
reducing 634:6 638:20
641:22 642:5,6
reduction 634:11 725:3
refer 649:14
reference 625:17
references 668:5
referred 660:16
reflect 635:11,13 645:25 reflected 642:22 652:4 702:3
reflecting 647:13 678:1
reflection 701:24 710:23
reflects 645:19 678:8,10
reframe 665:1
reframing 665:7
refuse 617:3,4 621:12

622:17 623:2 626:21
regard 657:16 664:23 regarding 672:13 684:21

727:12
regardless 646:21
649:11670:19
regards 625:11
regional 679:2
regularly 684:8 720:3
regulations 677:21
regulatory 629:24
664:18 665:6,16,24
666:3,4,16 676:18
677:13,14,16,23
678:11 681:17,21
relate 676:12
related 623:1 629:20
630:2 673:11 690:10
703:5 705:14 723:5,9

\section*{relates 701:24}
relationships 664:7
676:1 680:15
relative 695:14 729:11
relatively 645:4 678:17 695:14 701:3 708:14 709:22
remain 713:1
remainder 708:13
remained 662:23
remaining 678:17 715:12
remember 659:15
remind 621:22
Removal 712:20
repeatedly 708:9
rephrase 645:9
report 619:22 621:14,15
623:4,10 624:8,12,20 625:16 627:15 642:23 643:8,16 644:16 646:6 649:18,20 650:5
656:17,17 657:2,15,19 657:24 659:18,21,22 660:1,12,14,16 662:10 663:17 682:14 683:4 683:17,20 684:1,2,8,14 684:18 685:8 694:3,10 695:17,22 698:4,19 699:3 700:11 720:15 722:16 723:14 724:5,7
reported 617:24 722:14 729:7
reporter 718:22 729:5
REPORTERS 617:21
REPORTER'S 729:1
reporting 684:1 722:10
reports 668:5 722:11
representation 643:21
represented 647:5
678:12
represents 633:22
720:10
reproduce 647:6
repurposed 691:5
request 707:16 711:6 719:18
requested 623:22
requests 626:13 660:6

707:18,19 712:12,13 712:23 714:20
require 659:7 696:17 703:4,14
required 622:14 640:19 685:10 696:14 698:2
requirement 684:1
requirements 678:22
721:16 722:10
requires 622:8 700:21
reserve 623:12
residence 672:24
residences 639:19 672:25
residential 621:11 631:2 631:20 633:23 636:10 636:11 638:5 674:14 696:2 721:1,14,18
residents 622:16 688:15 688:25 689:9 692:8 722:5 726:18,22
resource 651:23
respect 664:9 669:9 677:14 678:13,25
respectively 633:22
responded 666:7
response 623:10 665:5 677:23 678:20 716:24
responsibility 673:24
responsible 651:25 653:11
responsive 626:12
rest 700:4 714:11,24
restrain 680:12
restrained 680:18
restriction 668:3
resubmit 649:14
result 627:12 630:4 634:11 635:25 650:6 685:19 696:18 721:4
resulting 686:17
results 688:4 721:5 724:23
return 675:18
revenue 626:11 676:12 684:21 694:11695:12 695:23 696:1,1,8 697:5 698:1,1 700:12,16 703:1 722:1
revenues 623:3 625:11 625:25 626:8
reversal 692:10
review 625:25 638:2 642:21 643:1,10 657:20 658:11 660:18 661:19 664:7 675:13 675:23 681:4
reviewed 626:3,5 656:20 675:6 676:10,11
reviews 627:2,3650:8 653:3
revised 675:4 724:10
rewards 667:23
RE-EXAMINATION 619:6 679:19
right 630:15,21 634:19 635:10 636:21 641:3

644:6 645:7 646:2,24 647:10 651:24 655:12 655:16 656:8 659:20 667:3,5 674:15 676:21 678:13 682:25 686:15 691:21,24 692:2 694:12 696:5 704:14 707:4,23 710:1 711:9 712:19 713:17 714:3 718:5,13
Rights 622:3,8
right-hand 655:22
rigorous 697:9
rise 681:22
rising 702:7 709:20
risk 666:19 667:9 668:11 668:12 669:17,22 676:16 677:5,8 678:14 679:2,6 681:6,12,17,18 725:7,22 727:12,13,16 727:20,23
risks 663:21 667:7,19
Road 668:22,25 675:23 679:25 680:7,12,20 727:14
Robert 618:7 674:7 724:25
robust 697:13 701:16 703:4,10
role 626:22 627:4
rolled 704:3
rolling 658:18,19 699:9 699:14,15
room 617:8 618:4,10 728:8,8
rooms 695:1 703:20
Rosie 618:12 623:14
rotated 691:13
roughly 638:12 697:19 716:15
round 649:24
route 696:19,19 697:17 697:19 713:14 716:8
routed 711:14,14,17
716:11 717:1
routes 629:11 697:19
702:16 703:5,11 715:25
routing 711:20 714:2 row 644:13 708:5 709:18 rows 634:14 640:4 RSF 680:15
RSS/RGG 674:19
running 679:2
runs 686:22,24 707:5
R3 625:11,24 626:23
632:8 642:21 643:8,17 652:21,23 653:7 656:17 659:12 663:14 668:16 698:8 721:12 722:8 724:2,14,16
R3's 624:20 625:16
\(\frac{S}{S .618: 1619: 14620: 1}\)

S 618:1 619:14 620:1 621:2
salary 626:15
same 636:17 637:14 638:13 640:15 647:20 648:6,7 661:9 689:13 699:12 710:2 717:15 721:5 728:8
San 617:1,9 618:5,8,15 621:7 622:9 626:4 633:24 635:21 650:17 650:20 665:15 668:21 669:2,21 680:1,3,10,22 680:22 681:6,9,10 685:14,17 710:7 712:8
satisfied 661:9
satisfy 657:25
Saturday 712:3
save 637:1,14,22
savings 654:8,24 727:6
saw 644:25
saying 702:6
says 660:5
scale 650:11
Scavenger 650:18 683:16
Scavenger/Golden 626:5
scenario 619:21 643:5 645:14 655:14 716:9 726:17
scenarios 644:19 646:15 646:18,19
schedule 669:15 674:19
scheduled 623:11 711:10 712:24
Schedules 659:24 669:10 724:13,22
Scholer 618:14
Schultz 618:16 619:3 623:21 624:21 625:3 625:24 632:24 652:18 674:12 675:11
score 659:5
screen 624:25 705:21 706:5
season-to-season 651:11
second 624:6 633:3 660:5 681:22 687:21 691:18 706:14 709:18 712:18 720:17 724:11
secondly 681:17
section 660:4,4 698:5 710:25 714:17,22 715:11
sections 644:14
sectors 694:22
see 627:20,21 631:23 632:3 633:14 635:21 638:4,13 641:12 644:11,13 646:17 647:7 648:7,21 650:7 651:10 659:7 664:6,8 664:17 665:24 668:4,4 668:12 669:10 671:5 677:22 691:24,24 692:6,7,18 693:1,10 694:1 700:4 705:13,21 708:2,23 709:15,19,24

712:22 714:18,20 715:1 716:20,20 718:14 720:19 722:14 725:3
seeing 635:10 649:3
702:23 708:16 717:13
seem 708:15 717:6
seems 630:16 672:20
702:24 704:9 708:9
721:2 726:19 727:15
seen 635:18 653:13 659:12,12 661:2 676:2 680:11,17 688:3,13 689:13 714:8
self-explanatory 629:19
sense 626:10 659:13
663:23 693:5 708:1
710:4 719:10 722:22
722:25
sentence 660:5
separate 625:18 668:21 716:14
separately 716:20
seriously 701:12
serves 626:24
service 619:20 620:3,4,5
633:3,6 637:20 638:8
638:10,10 639:11,13
639:23,23,25 640:3,7
640:16,18,19,24,24
641:1,15 645:24
646:13,16,19 647:13
648:13 654:4 655:10
655:20 670:20 672:8
672:12,21,21 673:15
675:5 684:22 687:2,3
693:12 695:2,3 697:11 697:15,17 698:2
702:10 703:12,19
706:7,12,19 707:17,18
707:23,24 708:12
709:1,2,10,13,17 710:1
710:5,17,23 711:2,5,12
711:19,25 712:7,11,25
713:4,25 720:19
721:14,16,18,22,24
722:4,13 726:5
serviced 633:24 712:23
services 622:10 636:10
636:11 652:1 673:4,6
686:8,9 688:24
servicing 694:12 696:8
set 729:8
sets 643:22
setting 653:3
settled 664:19,24
setup 693:12
several 641:5 653:13 654:19 689:16 690:8
SFE 689:12
shape 708:23
share 635:8 636:2 648:17 672:12
shared 633:2 719:6
shift 635:11,20 637:14
687:24 709:1,6
shifted 709:14 717:18
shifting 709:18 717:4
shirt 720:12
shorthand 729:5,10
show \(621: 7628: 1\) 633:25 640:10 641:11
676:7 690:4 708:9
710:13711:22 721:20
722:16
showed 712:2
showing 708:6
shown 640:2,9 656:4
shows 631:15 637:4 643:16 644:20 646:6
708:3,4 709:16,18
710:23 711:25 713:4
724:12,15
shut 691:4
side 631:22 638:1 655:21
655:22 691:25 721:1
sidewalk 727:5,10
side-load 703:6
signage 687:22 688:14 689:6
significant 630:4,7 646:7 649:9 665:15 677:16 691:11,15 710:10
significantly 638:11 678:20 687:1 709:20 723:20
sign-in 622:19
similar 625:16 635:23
638:4,7644:25 645:5
646:20,25,25 647:1,1
648:24 665:2,20
690:12 723:17
simple 691 :6
simply 640:10 647:24 662:7
since 628:20 653:1 660:14 662:24 665:14 700:13718:17
single 653:25 672:23 674:24 688:8 723:13
single-family 633:23 639:19 653:20 654:12 656:1 672:23,25 721:21 722:4 726:18 726:21
single-stream 628:8
single-unit 636:10 637:5
638:12639:25 640:6
sir 725:18
sitting 676:14
situation 667:11 711:20
six 710:20
size 633:8,9,11,17 634:6 634:20,21 636:13 637:18 638:24 653:22 654:23 694:25 695:14 697:12,18 703:20,20 707:6
sizes 633:19 635:4 637:9 638:14,15,19,20 640:5 671:19,22
slams 691:4
slightly \(631: 7\) 645:13 651:2 707:6,24 714:11

724:15
slightly-corrected 630:23
small 672:7,9 688:11 701:3
smaller 637:17 638:24
646:2 650:10 653:9
678:7 685:1 709:22
723:24
smallest 634:20 635:4 small-quantity 634:17
solely 635:13
solid 626:25 653:1,11,12
some 627:14 628:12,23
638:13 639:18 641:18
646:14,15,17,18
648:25 650:3,4,23
656:23 658:25 661:12
661:23 665:5,15 666:7
666:9,11,11 667:22,23
669:7 670:2,6,8,9
671:10,11 675:14
676:17 677:20 679:6
679:18 681:1 685:16
686:20,25 687:9,10,14
688:22 689:12,15
690:2,2,3 691:20
695:11 699:16,23
700:6,21 702:7,9,9,13
702:18 704:1,3,18
705:25 707:12,25
710:5 711:1,13 717:12
717:21 720:13,21
721:7,21 722:9,22 724:9
someone 635:8 687:18
something 624:25
628:22 647:4 661:2
663:24 664:3 665:9
668:13 670:25 671:1
671:19 674:5 676:18
700:19 704:9 717:24
sometimes 663:20 664:2 664:4 667:8
somewhat 629:19
630:12,17 647:6 651:9
710:9 723:20
sophistication 724:1
sorry 639:2 678:5 685:3 709:5
sort 646:5 653:25 661:12
661:16 693:16 716:17
sorts 693:6
SOs 706:15
sought 633:18 648:25 679:3
sound 663:9
sounds 654:10 670:10
South 714:23
space 689:7
speak 621:23 644:22 647:23 654:23 714:14 718:15
speaker 718:23 719:23 725:25 728:5
speakers 728:4
speaking 708:10 710:7
speaks 621:22 692:12 specific 633:16 646:13 646:16,21 650:1,3 672:13 677:22 680:14 705:24
specifically 670:1 671:13 690:10 695:9 696:12
spend 632:10
sphere 629:3 665:6
split 702:15 719:8,20
split-billing 719:4
spoken 713:23
spot 647:5
spread 638:9
staff 621:13,14 623:4,7
623:10 624:8,11 625:16 626:12 627:4 627:15 642:22 651:20 656:17 659:8,21,22 660:1,6,14 661:1 662:24 663:14 671:7 682:14 684:14,17,24 684:25 685:8 689:1,1 694:3,10 695:17,22 698:4,9 699:3,19 700:11 713:23 720:17 721:9,24 724:5,5,7 725:6
staffing 628:17 629:13 629:14 651:5,17 713:15
Staff's 621:18 694:8
stakeholders 622:16
stand 636:7 641:8
642:15 659:16 663:5 682:19
standard 628:11 639:25 669:23
standpoint 663:4 664:18 678:23
start 621:25 631:20 636:2 643:14 683:2 690:23 704:21 705:13 706:2 709:20,22 710:14 711:19 716:17 717:14
started 690:3 707:14 709:7
starting 699:24 709:3,10 710:8 717:11
starts 666:18
state 678:20 718:21
stated 624:17 649:8 662:15 663:16 702:2 719:17 721:14
statement 663:23 719:12 726:11
statements 676:3,6,22
states 662:10 684:24 static 678:17
Station 619:24 690:19
stations 629:1 652:3 688:25 691:23 727:14
statistics 709:25
stay 704:23 717:19
steep 638:14
stenographically 729:7
step 687:6
still 669:21 682:25 701:3
713:1 714:12 715:12
StopWaste 619:16 624:4
straight 685:25
straightforward 647:17
strategies 634:12 649:1
strategy 649:1
stream 688:10
streams 635:5 687:2
697:12,15 723:6,7,10
723:16
street 618:7 673:5 691:2
strikes 724:19
structure 619:21 623:2
625:9 630:22 631:17
633:5 634:3 635:12,17
637:6,16 643:4 645:16
645:21 646:25 647:1
648:11 670:24 671:2,9 671:13,25 673:1
679:23 701:14 702:4
structures 635:17
643:12,17 648:10,23
670:18,22
studies 702:2
stuff 651:12
subject 666:23 668:6 675:15 694:7 698:16
submitted 649:15 684:4
684:5,9
submitting 684:4
subscribed 636:1 641:16
subscriber 636:9 641:24
subscribers 636:13
638:12 674:17
subscribes 675:5
subscribing 633:21 655:10
subscription 636:18 637:20 641:13 642:6
subsequent 684:6 685:8 698:22
subsidiaries 675:22
676:1,9,15
subsidiary 667:13
substantively 631:5
substituting 624:16
success 687:10 688:13 688:20 689:13
successful 688:4 690:3
successfully 689:25
sufficient 660:20
Suite 618:7
summarize 649:19
summarized 663:17
summarizes 649:22
summarizing 633:1
summary 619:19 632:8
632:16,18 650:16
662:9,15
Sunday 707:24 708:11 712:4
Sundays 707:7
Sunset 626:5 650:18 668:20 683:3,16
support 651:25 695:5

713:14714:21 715:2
supportable 627:7
supported 627:16
supporting 626:13
sure 625:6 626:8 630:14
643:19 647:15 661:8
663:3,8 685:8,24
690:16 695:16 698:8
701:4,4 706:4 710:20
720:17 725:14
surprised 644:23 705:11
surprisingly 672:9
surrounding 703:10
survey 622:4,13,14,19 622:20
suspected 707:19
sustain 693:12
swear 718:20 720:4
sweet 647:5
swinging 651:11
switch 628:7 672:3
sworn 624:22 682:21
705:8 718:18 720:2,3,6
system 671:10 702:13
702:17 715:13 716:8
719:6,7,19
\(\frac{\mathbf{T}}{\mathbf{T} 619: 14620: 1633: 9}\)
table 621:9,15 622:20 632:17,24,25 636:7 638:1 640:2 641:11 643:15,15,18 644:10 644:25 646:5,8 663:8 688:1 722:2
tables 643:3 653:17
tail 709:25 714:1
take 647:24 682:6,19 687:13 699:1 701:11 719:8 727:22
taken 640:6 729:10
takes 684:12 686:7
talk 627:19 631:22 632:6 644:18 649:5,8 651:7 664:13 682:1 686:19
708:20 719:13 724:4,5
talked 639:5,17 647:21 672:11 700:11 717:4 725:20
talking 631:20 654:7
663:21 667:13 681:20
682:1 685:2,5 697:19
697:20,23 698:10,25
talks 650:16 653:20 684:20 719:15
target 689:18
targeted 685:13 693:25
715:19 717:7
targets 724:4,8,12 725:8
technically 671:24
techniques 664:23
technological 681:18
technologies 665:2
technology 725:10
tell 637:7 653:5 691:21
694:14,15 695:5
713:12
tells 671:19
ten 713:20 727:2
tenants 692:17,21
693:15
tend 723:22
Tenderloin 714:22
tension 725:13
ten-minute 682:7
term 685:20,22 686:4
701:1
terms 638:22 647:3
649:3 651:7 653:17
660:24 679:8 689:5
696:12 708:12 710:4
714:15 715:5
tested 643:20
testified 624:23 662:20
682:22 705:9 720:7
testify 694:7
testifying 654:18
testimony 621:17,19,24
622:25 623:4,9 625:10
639:17 662:23,25
682:13 700:7,20
701:24 702:1,14
thank 622:22,23 627:10
652:10 663:10 670:12
670:13 671:15 674:2
675:8 679:15 682:3
683:7,22 684:14 700:5
701:6 706:21 718:23
719:21,22 725:24
726:1,3 728:2,3,10,13
than-average 634:16
their 626:16 634:5,6,8,8
635:6 636:2,5,15,18 637:12,20 638:17,18 638:19,19 641:19,22 642:4,5,5,23 646:17 648:23 649:8,9 652:5 654:4,23 655:5,16 656:9,10 660:7 668:7 669:11,19 671:5,17,19 671:20 673:11,17,18 673:20,24 676:1 677:22 679:8 680:8,13 684:22 685:18 686:12 688:16,17,18 692:9 698:9,19 703:19,20
719:19 722:4 724:24
themselves 699:1
thing 669:6 681:13 700:25 711:7
things 626:13 628:4,24 630:15,25 647:2 648:2 651:8 653:12 666:11 677:10 687:16 702:21 708:24 710:6 714:9 715:24 716:3 723:9 725:13
think 624:7 627:13
630:11 631:1 636:8 638:16 641:10 647:2 649:1,2650:22 651:1 654:17 655:16 659:17 659:25 660:19,22
661:16 663:15,23

664:17 666:2 670:1 671:1,7 674:3 675:19
682:11 688:6 689:14
690:1,2 692:11 693:25
694:9 695:12 697:16
697:24 698:9,16
699:17 700:1 701:4,11
701:13,17 702:10
703:16 705:13 706:6
711:21 713:23 714:5
715:4 717:2,5,8 718:13 720:1,1,10,11,14,24 721:12,15,25 722:1,6,9 723:3,11,15,22 724:8,9 725:5 727:23
thinking 699:19 706:2 715:16
thinks 713:7
third 687:23
Thomas 618:10
Thompson 618:20
619:11 726:2,3,4
thorough 657:20
though 635:25 654:15 668:19 669:7 694:20
thought 647:9 662:21 705:16 714:4
thoughts 685:6 714:15
three 618:14 621:16 635:5 641:12,13 643:2 646:9 660:22 662:11 675:21 676:3,8 686:3 686:13 701:17 703:21 720:1 723:5,9,15
three-year 685:20,21 686:4 689:24
threshold 692:24
through 627:1 630:5 632:24 639:20 640:7
640:19 642:21,25
643:18 646:8 658:12
662:6 666:15 669:13
673:13 683:5,18 706:25 707:16 708:8 710:2 712:2 713:7 717:20
throughout 626:9 638:9 645:5 648:22 671:10 689:2 691:23
Thursday 719:4
tied 663:3
Tier 724:21
till 709:7 710:2,9
time 628:11,20 632:10 651:14 657:20 665:5 665:11 666:14 682:6 682:11 689:15 694:13 699:1,25 700:19 705:5 705:24 709:1,12,17,19 711:16 713:14717:15 723:1 725:17 726:14 728:6,14 729:7
times 690:8 716:24 717:12
tiny 705:16
tip 663:15 666:21,25 679:25 680:4,8,13,21

725:20
tipping 630:5
Title 622:2,8,11
titled 649:16
today 621:8,10 622:25
676:14 718:11,12
720:12 722:8
today's 621:8,21 622:12
together 640:6 682:16 701:18 710:23 713:5 713:20 715:10
Tom 618:19 619:10 675:12 719:1,3
tonnage 724:23
tons 724:20 725:4
top 644:13 665:9 708:4 709:16
topic 649:13 650:15
topics 718:9
total 633:25 686:3,13 722:12
touch 625:10,23 649:6 686:17
toward 723:17
towards 645:23 709:14 710:12
town 710:25 711:1 712:6 712:9,10,13 713:2 714:10
to-five 674:14
tracking 619:22 683:4,17 683:20 684:1
tracks 684:10
Tracy 618:20 619:11 726:2,4
traditional 692:11
traditionally 688:9 723:18
transcribed 621:21 729:8
transcript 729:10
transfer 629:1 652:2
transition 687:20
translate 695:22
transparent 649:2
trash 629:2 631:18 633:8
633:19,21 634:6,23 636:12,14 637:9,23 638:14,19,24 641:19 642:4 644:4,16 647:12 653:22 654:1,12,23 655:7,12,20 656:1 671:20 672:3,12 686:8 687:25 688:9,17,19 692:9 727:3,6
trash/64-gallon 633:13
treat 659:11
treating 710:25
treatment 660:8
trend 646:20 723:15,25
trends 638:7,12 640:25 644:25
triggered 724:13,22
truck 715:9
trucks 629:11 657:17
696:18 697:11 702:15 703:8,12
true 630:18 647:13 651:13 664:22 665:4 666:9,12 709:5 729:9 729:15
trying 635:12 647:12 659:20 666:11 707:21 717:19
turn 684:17 698:4
Turning 650:15
two 638:3,8 659:24
662:1 667:22 672:11 674:13 676:17,22 677:12 680:15 681:14 681:20 687:15 688:5 690:13 692:18 693:6 695:13 702:10 703:23 705:13,19,19 706:3 710:12,21 711:3,5,8 713:13,17,18,24 715:20,25 716:14 719:7 721:5,6
two-and-a 652:23
two-sided 632:22
two-to-five 638:6
two-unit 641:17,18 642:8
type 619:19 632:17,19 633:16 671:16 705:16 719:16 721:4,10
types 628:2 635:23 641:8 646:7,10 648:1,1 693:9 703:13 720:19 722:13
typically 688:8 689:10 691:9
T-20 674:17 675:5
\begin{tabular}{c}
\hline U \\
ultimate 670:19
\end{tabular}
ultimately 645:2 657:3
unclear 662:24
under 631:16 634:20 637:6 640:24 655:4,13 662:11 671:25 673:1 692:22 716:9,21 721:24 726:19,22 729:14,14
undergoing 665:5
understand 644:1 659:13 666:13 669:4 681:20,24 695:16 699:18 700:10,17 702:9 703:9,15 704:16 710:3 713:16 719:7 721:17 724:11
understandable 661:1
understanding 650:12
654:14,15 655:17 661:5,20,22 663:1 665:18,19 666:24 674:16,18,24 679:23 702:19 703:19 704:19 714:12 716:24 721:13 understood 657:3 659:9 undue 669:10
unique 667:18,19
unit 631:18 632:23 639:7 640:14,24 642:19

644:1,11 672:23
674:14,23 675:6
721:18
units 619:20 633:8 638:3
638:6,8 639:11,14
640:13,25 641:5
672:11 704:1,10 721:20
universe 633:23
university-based 653:9
unless 675:4 693:12 718:18
unpredictability 669:18
unreasonable 698:17
until 653:6 700:2 709:3
709:20 727:21
un-routed 716:16
upside 678:24 679:7
upsize 636:15
use 624:14 657:6 660:21
685:13 697:14 698:22
699:10,12 713:15 716:8 721:1,2 722:20
727:18
used 622:16,18 684:25
688:9 693:21 727:1
user 726:8
users 654:8 655:5 727:11
using 638:23 657:11 658:21 661:7 693:25 699:7,9 704:8 714:25
Usual 627:23 628:3,10
utilities 651:22
utilization 679:8
utilize 673:20
utilized 671:14
utilizing 634:9 638:21
641:23 642:6
U-1 637:25
U-2/U-5 639:3
V
validate 724:17
Valley 668:22 669:1
675:24 679:25 680:7 680:12,21
value 676:19
values 645:15
variability 651:4
variable 635:14,16
643:21 649:16,25 650:2,4,7 651:13 702:10 723:2,12 variables 643:20,22 644:3 702:3
variance 722:17
variation 651:7
variations 651:11
varied 707:20
varies 694:24
variety 627:13
various 633:2 638:9
644:13,14 645:5
653:17 684:12 720:18
vary 650:24 651:2
varying 707:6
venture 663:21
version 624:11,14,16 630:23 722:9
versions 624:9
versus 634:2 650:2
656:25 694:24 698:11
699:4 714:24 716:16
723:12 727:1
very 644:13,25 645:13
646:20 653:5,18 655:22 663:10 672:7 672:20 687:19 688:11 690:1 692:22 693:24 704:6 717:6 721:12,13 724:1 726:1 728:13
VI 622:2,8,11
via 634:24 645:15 647:8 661:25 662:25
vie 693:23
view 631:1 636:7 649:19 661:17
viewpoint 667:20,25
visited 693:4
volume 617:13 620:3,4 635:14 636:17 640:16 649:11 650:24 688:11 688:12 691:12 706:6 706:11,18 707:18,19 712:5 719:14,15
volumes 636:1 709:22 711:4
volumetric 637:23 644:5 644:12,16,17 646:23 vs 649:16

\section*{w}
wait 698:24 705:2
waiting 722:18
walk 632:24 639:20 643:18 646:8 706:25 713:7
want 621:22 625:10 649:8 659:21 661:8 669:2 670:14 674:5 683:12 689:18 692:6 697:14 698:25 701:1 719:18 724:4 726:4,10 726:13,17 727:12
wanted 663:12 670:23 675:13 679:21 681:13 681:16 682:2 704:15 707:17 709:8 719:3
wants 705:3
warrants 667:8
wasn't 625:6 630:24 646:16 662:6 681:25 694:13 726:20
waste 618:7 620:3,4 624:2 626:25 634:11 635:7,19 638:17,20 648:3,4,16,18 651:8 653:1,11,12 671:24 673:19,20,24 688:10 701:10 702:22 706:6 706:11,15,16,18 716:10 721:9
waste-generating

638:15
way 623:25 625:7 631:24 642:15 648:6,7,15,20
659:11 667:21 673:17
676:20 680:16 681:16
687:24 688:7,10
692:14 698:12,14
705:1 708:8 719:6 723:7,25 724:16 725:2
ways 639:18 689:4 710:21 714:10 723:12
wearing 720:12
Wednesday 617:12
621:1,8 728:7
week 620:3 694:7 699:19 699:19,24 700:2,4,5 706:8,9,12 707:19 708:14
weekdays 707:22
weekends 707:22
708:10
well 623:4 625:4 626:11
629:5,12 630:13
636:24 637:22 640:1
641:23 645:2 647:16
655:13,15,18 657:2,3
658:17 659:15 662:20
665:6 669:4 675:2
678:21 681:25 687:12
687:16 688:2 692:22
694:15 696:16 700:3
705:1 715:23 717:7 722:7
well-calculated 627:6
were 624:9 626:12 628:3 628:19 629:16 635:8 636:18 637:14 643:11 643:22 644:3,15,23,25 645:14 646:21 647:6
651:12 657:6 658:12
658:16,18,22 662:21
677:2,12,12 680:21
682:22 685:12 688:3 695:6,9 698:18 702:7
712:1 714:9 715:16
717:4 722:17 724:8
729:6,8
weren't 628:4,12
West 658:25 659:24 660:4
we'll 650:19 690:4
693:23 699:17,25
700:3 706:16 708:20
710:16 713:14 716:3
718:13
we're 621:10 632:10,22 639:6 642:24 647:12 647:20 649:3 654:7
663:20 667:3,13
682:15 684:4 686:25
687:6 691:19 697:18
697:20,23 698:10
699:7,8 701:12 707:11
708:19 722:24 726:5 727:22
we've 634:16 639:4 640:10 641:13 642:16

642:17 643:7,10 645:18 646:24 660:25 661:5 663:1,3 672:11 676:11 688:13 689:19 702:14 707:3,21 708:3 713:23 717:3,18 725:14
while 623:21,24 690:7
702:8,23
who're 634:15
Williams 618:19 619:10 719:1,2,3
willing 689:11
Wing 658:25 659:24 660:4
wish 693:21
wishing 718:15
witness 619:3,7,9 623:18,19 674:2 683:24 704:24
wondering 625:23 647:22 714:12,14 720:3
wood 701:21
word 630:14
words 657:10 658:4 667:12 711:4
work 623:23 625:10,16 625:24 626:2,8 627:10 627:12 642:21 643:10 643:17 664:1 665:13 670:23 671:12 689:11 691:10 693:23 710:22 710:22 713:8,20,20 715:5,10 717:6,7,8,18 717:18 725:11
worked 646:14 647:9 650:10 652:25 653:1,8 653:9,10 689:12 698:8
workers 626:14
working 626:12 627:8 647:3 648:23 652:21 662:1 666:11 714:13 717:20,23
works 617:2 618:2 621:6 621:13 622:1,9623:17 715:10 721:7
worth 690:6 694:20 699:23
wouldn't 705:1
written 661:12 663:1
wrong 630:25 654:18 655:25 678:5
www.depo.com 617:22
\(\frac{\frac{X}{X 619: 1,14620: 1}}{\frac{Y}{Y}}\)
yards 695:2,3 703:21 yeah 628:17 643:19 646:9 647:24 674:6 686:4,16 691:1,22 693:24 694:15 704:11 715:23 717:24 725:19 727:13
year 635:1 653:9 654:9 654:25 666:15 680:8,8 685:21 686:1 694:6 701:1,5 708:4,6,8 713:10,10,11 720:16 720:17 722:16 724:22 years 627:7,9652:24 653:6,10,12,14 654:13 654:19,25 669:14 677:24 678:16 686:3 686:14 689:16 698:22 708:8 727:2
year-over-year 699:7,14
year/fiscal 713:11
yellow 634:14
yield 700:3
yields 699:3
Z
zero 618:7 660:10 701:10
zero-waste 727:8
zone 715:13
zones 713:20
ZWI 724:4,10,12,24 725:8,11
\$
\$10 643:25 654:3
\$10.44 631:18
\$100,000 697:21
\$116.53 672:22
\$12 641:20 654:4
\$120 654:8,25
\$14 654:4
\$15 643:25
\$150 654:8,25
\$156,072 695:23
\$19 641:25
\$20 631:17 642:10 643:24
\$5 637:1 642:19 643:23 674:15,20 720:20 726:12
\$5-a-month 634:24 \$5-dollar-per-month 639:1
\$5.22 631:18
\$500,000 697:20
\$56.54 672:24
\begin{tabular}{|c|}
\hline 0 \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& 0 \% 632: 2 \\
& 0.2 \text { 700:15,25 }
\end{aligned}
\]} \\
\hline \\
\hline 1 \\
\hline \[
\begin{aligned}
& \text { 1 617:8 618:5 683:4 } \\
& \text { 1A 674:19 }
\end{aligned}
\] \\
\hline 1\% 685:11,21 686:1 \\
\hline 689:15 693:19,21 \\
\hline 700:15 \\
\hline 10 713:19 715:17,17 \\
\hline 10th 618:15 \\
\hline 10\% 686:23 692:24 \\
\hline 10\%-to-15 686:24 \\
\hline 100\% 716:7 \\
\hline
\end{tabular}

11:10 728:14
110 689:25
111 633:11
115 689:25
12:1 644:6
1200 618:7
121 633:15
122 633:15
13876 617:24 729:4,22
14th 621:12
1455 618:7
15 627:7 684:17 694:3
15\% 686:23
15-plus 627:8
150\% 719:13
16 636:23 655:8,23 656:6 708:4 713:10,10 722:5 727:1
16\% 636:21
16-gallon 634:22 636:14 642:3
16.4 632:2,4 642:1,11 647:19
16/16/4 721:17
16/16/8 721:19
17 698:4 708:6
18\% 713:11
18,000 642:14
\(\frac{2}{\text { 2-through-5-unit 640:1 }}\)
2.67 699:3

2/10ths 689:20 700:15
2:1 644:4,7
20 633:21 642:20 643:15 653:23 713:19 722:5
726:21 727:1

\section*{20\% 630:1,9}

20-gallon 634:19,21
654:1,8,12 655:5,6
656:10 674:21,23,25
720:20 726:7,7,17,24
727:2,11
20/32/32 640:3
200 691:2
2000 641:14 653:1,6
2001 654:17
2006 657:19,23 658:14 660:12
2013 665:14 700:14 720:15
2014 628:21
2016 683:4,5,18 712:1
724:21
2017 617:4,12 621:1 624:2 658:13 713:11
729:17
2018 666:15
21 666:15
22 659:25 666:15 724:22
22nd 624:1
22-gallon 656:8,9
23 629:10
234 618:10
235 724:21
236,000 724:21
24\% 628:15 630:9

24-month 658:18
24-months 658:19
25 694:6,9,18 695:10,19
695:21 696:7,14 697:8
697:15,25 704:1,17
25\% 670:19 692:24
720:14,16,18
26 617:12 621:1,8
28 724:7,12
28\% 627:22 630:9 678:1
288-3376 617:22
290 726:23
\begin{tabular}{|c|}
\hline 3 \\
\hline \(3623: 11\) 695:2,3 697:15 \\
\hline 723:10 \\
\hline 3rd 728:7 \\
\hline \[
\begin{aligned}
& 3 \% 685: 21 \quad 686: 3,13,15 \\
& 699: 4
\end{aligned}
\] \\
\hline 3:1644:9 \\
\hline 3:30 709:3 \\
\hline 30\% 645:9,12,17 716:15 \\
\hline 31 683:5 \\
\hline 311 707:16 \\
\hline 32 631:18,19 633:21 \\
\hline 636:23 637:2 641:19 \\
\hline 650:16 653:22 654:13 \\
\hline 655:13,23 656:1,5,7 \\
\hline 721:4 \\
\hline 32-gallon 636:12,25 \\
\hline 654:2 655:2,12,20 \\
\hline 656:2,12 \\
\hline 32/32/32 636:16 640:3 \\
\hline 642:9 \\
\hline 32/64/32 642:2 \\
\hline 348 618:4 685:15,17 \\
\hline 686:11,17 693:3,4 \\
\hline 36\% 632:3 \\
\hline 38\% 649:24 \\
\hline
\end{tabular}

38\% 649:24
\begin{tabular}{l}
\hline 4 724:21 \(\mathbf{4}\) \\
4-gallon 726:25 \\
4.3 685:19 686:14,18 \\
4:1 644:10 \\
4:30 709:4,5 711:15 \\
\(716: 12717: 1\) \\
40\% 649:25 650:7 724:23 \\
\(725: 3\) \\
400 617:8 728:8 \\
\(409,000724: 20\) \\
\(43649: 14\) \\
\(49657: 15\)
\end{tabular}
\begin{tabular}{|c|}
\hline 5 \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { 5th 729:17 } \\
& 5: 1644: 10
\end{aligned}
\]} \\
\hline \\
\hline \[
\begin{aligned}
& 50 \text { 694:8 695:17 696:6 } \\
& 704: 17
\end{aligned}
\] \\
\hline 50\% 636:9 693:10 \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
51\%-or-greater 687:6 \\
53 662:10,14
\end{tabular}} \\
\hline \\
\hline 55\% 631:25 \\
\hline 6 \\
\hline \(6617: 13\) 717:17 \\
\hline
\end{tabular}

Atkinson-Baker Court Reporters
www.depo.com
Page 15


Hearing - Volume VI
April 26, 2017```

