AGENDA
Sustainable Storm Water Funding Task Force
August 16, 2011
City Hall, Room 209, 12:00 PM – 1:30 PM

1. Introductions of Task Force members and meeting attendees.

2. Review and approval of the SSWFTF minutes from July 19, 2011.

3. Presentation on roadmap, rate structure, and exemptions.

4. Discussion of storm water rate structure and discussion of exemptions.

5. Discussion of public outreach plan.

6. Confirm Date for Next Meeting: The next meeting is currently scheduled for September 20, 2011

7. Adjourn

MINUTES
Sustainable Storm Water Funding Task Force
July 19, 2011
City Hall, Room 209, 12:00 PM – 1:30 PM

1. Introductions of Task Force members and meeting attendees.

All members were in attendance except for Peter Gellerson, David E. Robinson, and John Cannell. Staff present included Ian Houseal, Mike Bobinsky, Doug Roncarati, and Katherine Earley. There were five members of the public in attendance.

2. Review and approval of the SSWFTF minutes from June 21, 2011.

Brooks made motion, Bohlin seconded with a correction to his name. Unanimously approved with the correction.

3. Review of the Task Force draft work plan.

Houseal summarized the updated work plan for the Task Force to the end of their work in December stating that this meeting would be about fees, the next about exemptions, and the third meeting about credits. All of these aspects of a storm water fee would inform the other and the Task Force may need to continue to discuss each item depending on the discussion of the Task Force.

There was discussion about the need to simplify the message that the Task Force could bring back to their organizations. At this point, the Task Force needed to look at aspects of the options in detail.

There was discussion of the need to notify the public of what is going on. There is a need for public outreach. Earley suggested reaching out to Bangor.

4. Summary of the outcomes from the last meeting including:

- **a. Consensus to develop a storm water fee option in greater detail.**
- **b. Preliminary discussion of allocating combined sewer costs to a storm water fee.**

Houseal summarized the outcomes of the last meeting: The update to continue to develop a storm water fee option in greater detail was delivered to the Energy and Environmental Sustainability Committee. The issue of allocating costs from combined sewers was presented but there was no discussion on the issue.

5. Review of revised cost projections reflecting a fifteen year CSO Tier III construction schedule.

Houseal summarized the material provided to the Task Force reflecting the adjusted construction schedule as it relates to the CSO Mater Plan proposed schedule.

6. **Review of annualizing costs based on a five year average for the purposes of exploring and determining appropriate rate structures and rates.**

Houseal summarized the spreadsheet stating that the annualized costs spreadsheet is intended to be used to talk about cost allocations and represent the first five year average of the program costs. It is understood that the costs would increase over time. Five years was chosen since it represented a short term outlook. Other averages could be used, but for working purposes the Task Force needed to accept or propose an alternative as a way to determine the working cost figure in regard to determining fee structures and implications.

7. **Review of the "Dow Jones" properties list.**

Houseal stated that the "Dow Jones" is a way for the Task Force to see the impact of financial decisions on a representative list of properties in the City and if the Task Force agreed, those would be the representative list of properties to determine the outcomes of the rates.

8. **Presentation of facts on impervious area in Portland.**

Houseal summarized the information on the table stating that this information would be valuable to the Task Force as they discuss next week: exemptions.

9. **Recommendation and discussion of rate structures for further exploration from reports provided.**
    a. **Flat rate**
    b. **Tiered rate (ERU)**
    c. **Variable Rate (Impervious Area)**
    d. **Flat Rate + Variable Rate (Gross Area + Impervious Area)**

Suslovic summarized the rate structures. It was requested that the Task Force familiarize themselves with the New England Finance Center document on Storm Water Fee Rates, since this document would encompass all the decisions the Task Force would be making before the next meeting. The Task Force would have questions following up to this month's meeting and would be given new material on exemptions for next month's meeting at the next meeting.

10. **Confirm Date for Next Meeting: The next meeting is currently scheduled for August 16, 2011**

11. **Adjourn**

Stormwater Utility Final Meetings Roadmap

The purpose of this handout is to describe the objectives and roadmap for the remainder of the Sustainable Storm Water Funding Task Force meetings.

Objectives for Meetings

Based on feedback from the City Council and the Sustainable Storm Water Funding Task Force there is general support for taking the next focused steps in development of a storm water fee recommendation for consideration by the Council. That said there is a need to develop a basic framework for the fee structure by December. That structure will need to have enough definition in terms of basic policies to allow both for City Council to authorize initiation of implementation if recommended and if approved and for the potential to establish an enterprise fund or special revenue fund within local government for fee implementation funding support purposes.

The eventual goal for the December timeframe is to allow the Council to authorize staff to begin the implementation process. We anticipate that both Council and this Task Force will provide input on key decisions and that Council will have several opportunities to recommend a change of course or to even decide to go another direction all together once they begin implementation.

Meeting Roadmap

You might recall from a previous handout that there are a number of legal considerations in rate making best done in a rational and logical order with decisions resulting from thoughtful consideration of options. In the time remaining a recommended path that will provide key framework recommendations potentially allowing Council to authorize forward movement has been laid out according to the Task Force Work Plan.

August Meeting - Rate Structure and Exemptions

- Impervious and gross area options
- Residential options
- Handling of roads, public property, and undeveloped land.

September Meeting - Credits and Exemptions

- Basis for and types of credits
- Amount of credits
- Exemptions

October Meeting - Rate and Program Pro Forma

- Review of CSO cost allocation options and impacts
- Program five-year plan, level of service and probable rate
- Functional organization
- Appeals process

November Meeting - Data and Billing and Rate Resolution

- Billing
- Customer service
- Timing and scope
- Public Involvement

December Meeting - Review of Final Recommendation and Implementation Steps/Cost

Stormwater Utility Rate Structure and Exemptions

The purpose of this handout is to provide background information in consideration of a basic rate methodology with specific emphasis on the factors to use for fee calculation, residential charge simplification, and treatment of exemptions of public streets and public property.

Rate Structure Policy

When we bill for stormwater services, we are recognizing a property's or a person's use of the stormwater system for the discharge of their property's runoff. The stormwater system is a public system that carries away runoff from both public and private properties – everyone pays because everyone contributes to runoff. The framework that describes how much each property pays is called the "rate structure."

The rate structure developed for a particular utility is divided into three modules:

(1) the basic rate methodology;

(2) modification factors, which can be applied to any of the rate concepts to enhance equity, reduce costs, and meet other objectives; and

(3) secondary funding methods that can be adopted in concert with the service charges.

Typical modification factors might include: flat rates or tiers for single-family residences, fixed costs per account, and a crediting mechanism. Secondary funding methods might include plans review fees, inspection fees, and fees in lieu of detention but will not be discussed until and if implementation begins. There are a number of policies that must be established, many of them based on strictly technical considerations. However, there are several key and immediate policies that we want your input on which we will discuss together.

Criteria for Policy Evaluation

There are general evaluation criteria that rate makers use when they look at various policy options. These criteria can help us as we look at all the additional policies. For each of the basic additional policy considerations we want to think of them in terms of eight evaluation criteria:

1. Equity – does this policy decision promote equity, or at least not violate equity (fairness) principles?
2. Balance of rates with the level of service – does this policy decision tend to lead toward an intuitive balancing of the fees someone pays and the services they get?
3. Data requirements and compatibility with data processing systems – does this policy decision work well with how we are doing billing?
4. Cost of implementation and upkeep – does this policy decision have undue administrative burden?
5. Consistency with other financing and rate policies – does this policy decision fit well with the overall rate structure?
6. Revenue sufficiency – does this policy decision, if applicable, generate significant enough revenue to make it worthwhile?
7. Revenue stability and sensitivity – does this policy decision impact the stability of the revenue stream or is it overly sensitive to outside factors?
8. Flexibility – are there any flexibility concerns with this policy decision?

Credits vs. Rate Methodology

It should be noted that there are always several ways to arrive at outcomes that reflect a community's desire to bring about equity or certain policy emphases. Use of the rate methodology applies blanket rules to all properties to which exceptions must be made where a blanket decision is clearly recognized as an "unintended consequence." For example, under a gross area methodology a very large public park may have a large stormwater bill even though it is essentially an urban forest. Was that the intent?

One way of making such an exception or of doing the same thing a rate methodology does but doing it on a case by case basis is through the use of credits. So, for example:

- Impervious area that is not directly connected to the system has a very different runoff response than directly connected impervious area – should that be recognized in the rate methodology automatically, or by having a property owner apply for a special recognition?
- Not all open space is created equal. Urban forests have a volume of runoff response that is one-tenth that of turf grass. If this is not recognized in a gross area methodology it might be recognized with a crediting mechanism.
- Impervious area can be mitigated to some extent with stormwater control structures. Should such structures, properly designed and maintained, result in a reduced fee?

So as you consider the options for a basic rate methodology also consider whether a preferred treatment or emphasis could be accomplished more easily in the rate structure (i.e. automatically) or through a crediting mechanism (i.e. upon application).

Basic Rate Methodology

Policy Question: Should Portland: (1) charge on the basis of impervious area only, (2) add a gross area charge too, or, alternately (3) recognize green space preservation?

The basic rate methodology defines what makes up the rate that users will be paying. The three main impacts of urban development are increases in: peak flow, volume of discharge, and amount of pollution. All other impacts can fit into these three basic categories. When we look at the primary cause for each of these three major impacts in an urban setting (versus an agricultural one, for example) it is the conversion of forests and fields to impervious area – pavement, roof tops, etc. It is this conversion to impervious area that causes the City to invest in the public drainage system – and the costs are roughly proportional.

Therefore, all legally defensible stormwater utilities use some surrogate of impervious area in their rate methodologies. A 2010 survey found that 55 percent of all stormwater utilities responding used impervious area as the only factor that went into the rate calculation and 94 percent included some measure of impervious area in their calculation.[1]

But there are other factors or ways to configure the rate methodology to emphasize certain other impacts or encourage certain kinds of development. Many of these considerations are handled with a stormwater crediting or secondary funding system, which we will discuss in another meeting. Some factors can best be handled in the makeup of the basic rate methodology itself.

[1] Black and Veatch, 2010 Stormwater Utility Survey

Two in particular are commonly considered – though there are many variations:

1. Some communities charge for gross parcel area in addition to impervious area, reasoning that stormwater runs off all parcels and thus, all should pay. In this concept the idea is that management of the total stormwater system is of concern, not simply handling the increases due to urban development.
2. Other utilities want to encourage green space and set up charges based on an intensity of development factor – so that the same amount imperviousness would be charged less if it were located on a larger lot with more green space.

These latter two approaches are almost opposites of each other, and both have been used in other places. They are ordinarily seen as mutually exclusive, although a rate methodology could be conceived that would incorporate both of these additional considerations. The 2010 survey we cited above, which found that a majority (55%) of stormwater utilities base charges on impervious area only, also found that of the remaining stormwater utilities:

- 29% Charge based on gross area plus impervious area
- 10% Recognize the benefits of green space through an intensity of development factor
- 6% Use "other" basis for fees

This then sets up three basic rate methodology alternatives – though there are a million variations on these three themes:

Option 1. Charge on the basis of impervious area only

Option 2. Charge on the basis of impervious area plus a lesser charge for total gross area. Note that under this charge, vacant land would be charged some amount – typically much less per unit area than impervious area.

Option 3. Charge on the basis of intensity of development – thus recognizing green space with a reduced charge if the percent impervious is less than some standard percent.

Two examples using a commercial property will illustrate the differences among these options. We will use a sample site that is 10 acres with 4 acres of impervious area and 6 acres of green space.

We will analyze the site as if it were two different parcels – a larger one of ten acres and a smaller one of 5 acres:

(1) First we will analyze it using the whole 10 acres and determine the user fee under the three options.

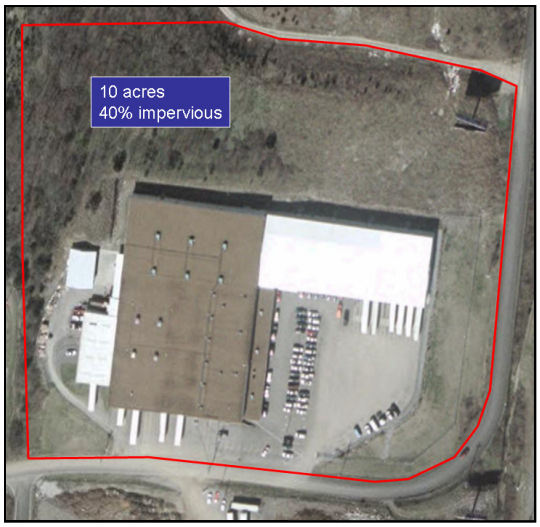
(2) Then we will take away 5 acres of gross area/green space and show what happens to the site's charges under each of the three optional ways to look at the site.

We will discuss pros and cons of each of the methods in our meeting and arrive at a preferred option or at least obtain your input on your concerns and preferences and suggestions to make the rate better reflect the cross section of opinion represented by you.

We will make a simplifying assumption of a billing unit (called Equivalent Residential Unit) of 2,500 square feet (see residential section below) though different units could be suggested (e.g. "per 1,000 square feet").

Example of the Three Methodologies – 10 Acre Site

The figure shows a typical commercial property that is 10 acres in gross area including 4 acres impervious area (40% impervious).



Option 1 – Impervious Area Only

ERU size = 2,500 sq ft (this is the billing unit)

Charge pre ERU = $5.00/month/ERU

The site has 4 acres of impervious area = 174,240 sq ft = 174,240/2,500 = 69.7 ERUs

Rounded up to 70 ERUs

Monthly charge (neglecting credits for now) = 70 * $5 = $350.00

Option 2 – Gross Area Too

Includes Option 1 plus a charge per gross area

It has been determined that the charge per gross area ERU will be 1/20th of the impervious charge or $0.25 per ERU per month

Gross area = 435,600 sq ft = 435,600/2,500 = 175 rounded ERUs

Charge for gross area = 0.25 * 175 = $43.75/mo

Total charge = $350.00 + $43.75 = $393.75

Option 3 – Intensity of Development

For this option we have set the "standard" impervious percent for commercial property at between 60 and 70% impervious. Anything less than this gets a reduced rate, more than this gets a higher rate.

To increase our ability to compare among the options we will charge on the basis of measured impervious area and percent impervious (impervious/gross area).

Our property is 40% impervious and, thus, would pay in the 30-40% bracket = $2.86/ERU/month

The site has 70 impervious area ERUs

Monthly charge (neglecting credits for now) = 70 * $2.86 = $200.20.

Percent Impervious Table		
Low (value+)	High	Rate per ERU per Month
1	10	$0.71
10	20	$1.43
20	30	$2.14
30	40	$2.86
40	50	$3.57
50	60	$4.29
60	70	$5.00
70	80	$5.71
80	90	$6.43
90	100	$7.14

Example of the Three Methodologies – 5 Acre Site

In this case we have the same site but now it is only 5 acres in size. We are imagining that much of the green space (5 acres) is not part of the site. The figure shows a commercial property that is now 5 acres in gross area including 4 acres impervious area (80% impervious).

Let's look at how the charge changes based on keeping the identical impervious area but reducing the overall site area by taking away 4 acres of green space/gross area.

Option 1 – Impervious Area Only

ERU size = 2,500 sq ft (this is the billing unit)

Charge pre ERU = $5.00/month/ERU

The site has 4 acres of impervious area = 174,240 sq ft = 174,240/2,500 = 69.7 ERUs

Rounded up to 70 ERUs

Monthly charge (neglecting credits for now) = 70 * $5 = $350.00

The charge stays the same because it does not depend in any way on gross area or green space.

Option 2 – Gross Area Too

Includes Option 1 plus a charge per gross area

It has been determined that the charge per gross area ERU will be 1/20th of the impervious charge or $0.25 per ERU per month

Gross area = 217,800 sq ft = 217,800/2,500 = 88 rounded ERUs

Charge for gross area = 0.25 * 88 = $22.00/mo

Total charge = $350.00 + $22.00 = $372.00

The charge goes down, compared to Option 2 for the 10 acre site because the gross area charge is less

Option 3 – Intensity of Development

For this option we have set the "standard" impervious percent for commercial property at between 60 and 70% impervious. Anything less than this gets a reduced rate, more than this gets a higher rate.

To increase our ability to compare we will charge on the basis of measured impervious area and percent impervious (impervious/gross area). Our property is exactly 80% impervious and, thus, would pay in the 70-80% bracket = $5.71/ERU/month (note that one more square foot of impervious area would raise the whole rate to $6.43/ERU).

The site has 4 acres of impervious area = 70 rounded ERUs

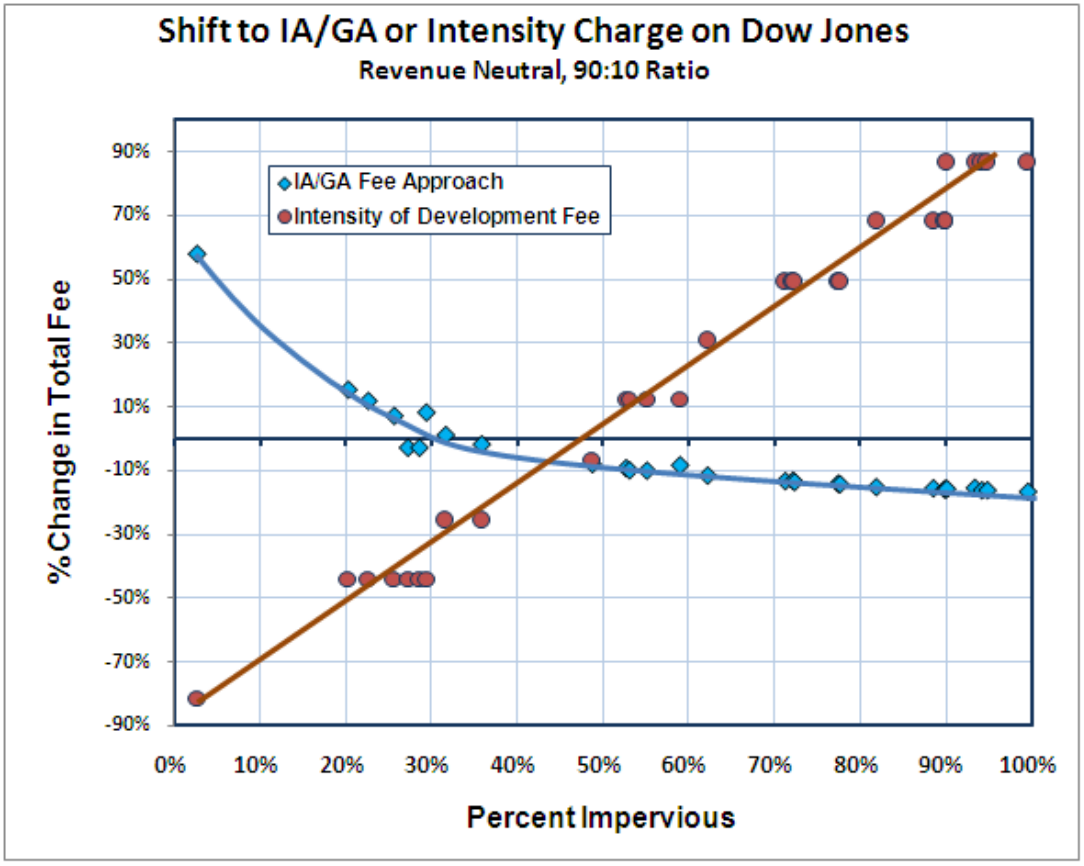
Monthly charge (neglecting credits for now) = 70 * $5.71 = $399.70.

This charge is higher than the 10 acres site due to the intensity of development.

Percent Impervious Table		
Low (value+)	High	Rate per ERU per Month
1	10	$0.71
10	20	$1.43
20	30	$2.14
30	40	$2.86
40	50	$3.57
50	60	$4.29
60	70	$5.00
70	80	$5.71
80	90	$6.43
90	100	$7.14

Impact to the Dow Jones

The impact of switching to an impervious area/gross area (IA/GA) or intensity of development type of rate structure was tested against the Dow Jones list and is shown in detail in the table on the next page. The absolute values of the changes are dependent on the specifics of the policy but the direction of change and magnitude of change from an impervious only charge are typical – and real world approaches from other places have been used herein. The figure below illustrates the changes from the impervious only approach. In this illustration the total revenue was kept neutral. That is, a shift to a different approach generated the exact same revenue from among the Dow Jones list – it is just generated differently.



In this figure the horizontal axis is the percent impervious of the property and the vertical axis is the percent change (increase or decrease) from the impervious only charge. You will not several things about this figure:

- Properties with little impervious area tend to pay more under the gross area approach whereas they pay nothing under the other two approaches.
- Higher percent impervious properties pay little more under the gross area charge methodology since the gross area charge is a much smaller proportion of the total charge.
- Under the intensity of development methodology properties are penalized for their percent of impervious cover and strongly rewarded for the preservation or creation of green space.
- Do not let the steepness of the line unduly influence our thinking. The intensity of development line could be flattened through a different application of intensity factors making the reward and penalty much less. However, it was derived using annual volume of runoff considerations – and thus has a basis in science. There are other bases.

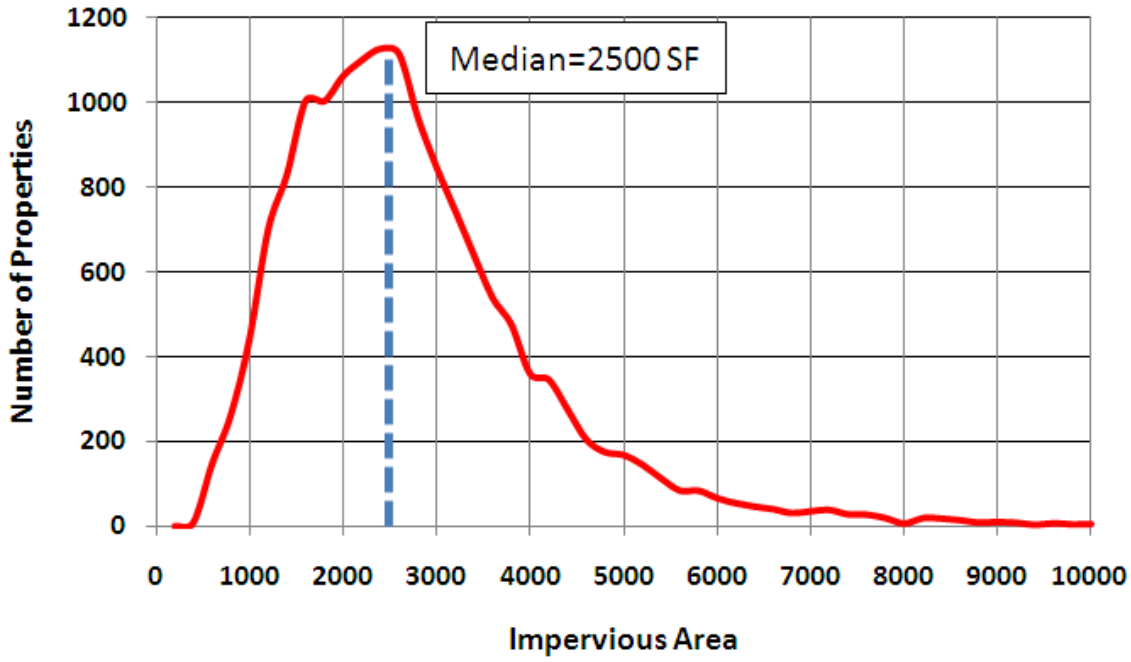
Impact of Rate methodologies on Dow Jones Properties

		Impervious Charge Approach			Impervious and Gross Area Approach						Intensity of Development Approach		
	Type	Impervious Area sq ft	Impervious Area ERUs	Impervious Area Monthly Fee	Total Area sq ft	Gross Area ERUs	IA Portion	GA Portion	Total IA/GA Monthly Fee	% Change IA only to IA/GA	% Impervious	Intensity of Development Monthly Fee	% Change IA only to Intensity Factor
1	Vacant	1	0	$0.00	26,873	11	$0.00	$9.15	$9.15	∞	0.0%	$0.00	0.0%
2	Vacant Industrial	1	0	$0.00	565,006	227	$0.00	$188.91	$188.91	∞	0.0%	$0.00	0.0%
3	Incustrial shop	584	1	$10.00	22,711	10	$7.49	$8.32	$15.81	58.1%	2.6%	$1.86	-81.4%
4	Roadways	68,643	28	$280.00	339,412	136	$209.72	$113.18	$322.90	15.3%	20.2%	$156.87	-44.0%
5	Airport	2,135,000	854	$8,540.00	9,468,290	3788	$6,396.46	$3,152.46	$9,548.92	11.8%	22.5%	$4,784.55	-44.0%
6	School	170,404	69	$690.00	666,004	267	$516.81	$222.20	$739.01	7.1%	25.6%	$386.57	-44.0%
7	Small business	5,106	3	$30.00	18,786	8	$22.47	$6.66	$29.13	-2.9%	27.2%	$16.81	-44.0%
8	Residential	5,412	3	$30.00	18,981	8	$22.47	$6.66	$29.13	-2.9%	28.5%	$16.81	-44.0%
9	Residential	2,456	1	$10.00	8,375	4	$7.49	$3.33	$10.82	8.2%	29.3%	$5.60	-44.0%
10	Condominium	138,689	56	$560.00	439,122	176	$419.44	$146.47	$565.91	1.1%	31.6%	$419.30	-25.1%
11	Office building	289,315	116	$1,160.00	808,567	324	$868.84	$269.64	$1,138.48	-1.9%	35.8%	$868.55	-25.1%
12	University	260,896	106	$1,060.00	552,222	221	$808.92	$183.92	$992.84	-6.1%	43.7%	$1,009.40	-6.5%
13	Undeveloped	43,728	18	$180.00	83,083	34	$134.82	$28.30	$163.12	-9.4%	52.6%	$202.16	12.3%
14	Apartments	37,806	16	$160.00	71,308	29	$119.84	$24.13	$143.97	-10.0%	53.0%	$179.70	12.3%
15	Charity	108,716	44	$440.00	197,486	79	$329.56	$65.75	$395.31	-10.2%	55.0%	$494.17	12.3%
16	Residential	2,414	1	$10.00	4,097	2	$7.49	$1.66	$9.15	-8.5%	58.9%	$11.23	12.3%
17	Incustrial factory	379,094	152	$1,520.00	610,164	245	$1,138.48	$203.89	$1,342.37	11.7%	62.1%	$1,980.68	30.0%
18	Auto dealer	211,130	85	$850.00	296,600	119	$636.65	$99.03	$735.68	-13.4%	71.2%	$1,270.65	49.5%
19	Religious	59,512	24	$240.00	82,579	34	$179.76	$28.30	$208.06	-13.3%	72.1%	$358.77	49.5%
20	Fast food	46,162	19	$190.00	63,860	26	$142.31	$21.64	$163.95	-13.7%	72.3%	$284.03	49.5%
21	Healthcare facility	214,784	86	$860.00	277,639	112	$644.14	$93.21	$737.35	-14.3%	77.4%	$1,285.60	49.5%
22	Shopping center	245,587	99	$990.00	316,621	127	$741.51	$105.69	$847.20	-14.4%	77.6%	$1,479.93	49.5%
23	Incustrial	55,007	23	$230.00	67,245	27	$172.27	$22.47	$194.74	-15.3%	81.8%	$387.18	68.3%
24	Transit	116,383	47	$470.00	131,577	53	$352.03	$44.11	$396.14	-15.7%	88.5%	$791.19	68.3%
25	Government	25,141	11	$110.00	28,007	12	$82.39	$9.99	$92.38	-16.0%	89.8%	$185.17	68.3%
26	City Services	72,882	30	$300.00	81,079	33	$224.70	$27.46	$252.16	-15.9%	89.9%	$505.01	68.3%
27	Utility	279,033	112	$1,120.00	309,957	124	$838.88	$103.20	$942.08	-15.9%	90.0%	$2,093.56	86.9%
28	Restaurant	17,333	7	$70.00	18,578	8	$52.43	$6.66	$59.09	-15.6%	93.3%	$130.85	86.9%
29	Hotel	46,486	19	$190.00	49,383	20	$142.31	$16.64	$158.95	-16.3%	94.1%	$355.16	86.9%
30	Parking lot	136,614	55	$550.00	144,143	58	$411.95	$48.27	$460.22	-16.3%	94.8%	$1,028.09	86.9%
31	Light	52,739	22	$220.00	53,008	22	$164.78	$18.31	$183.09	-16.8%	99.5%	$411.24	86.9%

Residential Rate Policy

Policy Question: Should Portland charge all single family residential properties a flat rate, several tiers, individually measured charges - or some hybrid idea?

In Portland there are about 20,504 parcels that will be billed, of which 15,463 (75.4%) are single family residential (SFR) structures with impervious areas between 1,000 and 10,000 square feet. The figure below shows the distribution of measured imperviousness for SFR parcels in this range. The median value is about 2,500 square feet. The distribution of impervious areas is typical with a short tail on the left and a long tail on the right where



there are some very large residential properties. Because of some questions in the data the size has been truncated at 10,000 square feet – though doubtless there are some larger single family residential properties.

Compared to non-SFR properties the variability of measured imperviousness is small. Most SFR properties are similar. Cost of service analyses conducted in Cincinnati, Tulsa, and Louisville all indicate that the cost of stormwater management services and facilities does not change appreciably based on the size of the parcel.

Because of this, the majority of cities and counties that have stormwater service fees employ a simplified charge for single-family residences. The principal motivation for using a simplified residential rate is to reduce costs, without sacrificing equity. The details of simplified residential rates vary from community to community. Many use just one rate for all developed single-family residential properties, but several other approaches have been adopted:

- Some use a single, flat rate while others have two or more flat rate categories or classes of residential properties.
- Several communities have a flat rate or two tiers but have a cutoff number above which all residences are charged as if they were commercial properties. This captures the imperviousness of the few very large properties in a more equitable way.

Preliminary investigation of the stormwater data in Portland suggest that there are several alternatives that do not violate our eight criteria, described on page 1:

1. A single flat rate charge for residences would not diminish the overall level of equity of a service fee if the larger homes are charged as commercial property.
2. A two-tiered structure might enhance the equity compared to a flat rate given the many smaller homes in the housing stock. There does not seem to be a justification in going to more than two tiers, though that could also be done – and may be an option depending on the basic rate methodology chosen. Though any logical break might be chosen, it might be advisable to break the second tier at 4,200 square feet. The reason is that the median of the homes larger than this size is 5,056 square feet which is almost exactly double the overall median – justifying a charge of 2 ERUs for the high tier.
3. If desired, multiple tiers could be chosen – one advantage is that the fee amount difference from one tier to the next is smaller. Another way more than two tiers is used is to recognize the very smallest single family residential properties such as mobile homes or condominiums. Some communities recognize the very largest properties with a "super high" tier.
4. Investigation of the data for single family residences indicates that there is probably insufficient reason to make an individually measured calculation.

In all cases we can opt to charge the very largest homes on an individually measured basis as if they were commercial properties. Depending on our recommendation for a basic rate methodology, there may also be other options to consider in terms of how we handle lot size and green space.

For now let's limit our consideration to the first three basic categories of choices above. We will generate and discuss pros and cons in our meeting for two options and whether we wish to charge the largest homes as commercial property.

Exemptions: Roads and Public Property

Roads and public property are two categories of impervious cover that are sometimes considered separately by local governments with widely variable results from total exemption to total payment. The reasoning for this variability has little to do with the actual physical impact of these properties and a lot to do with funds availability and the fact that the dollars come from the same citizens but follow two different pathways – user fee basis or tax basis. Because they may be handled in different ways they will be considered separately.

Public Roads

> *Policy Question: Should Portland charge for public roads, and, if so, how should the City's bill for those roads be handled?*

It is important to place this decision within the context of current expenditures and revenue sources. The City currently spends about $1.135 Million (m) on stormwater related management. The source of the funds is the sewer fund. Projected future non-capital operational costs are about $620,000 annually. Future total stormwater program costs including moderate capital construction costs are in the $4m per year range. So in summary in fairly round numbers:

- $1.135m Current sewer fund costs estimated to stormwater management
- $0.620m Future non-capital operations.
- $2.245m Future annual capital construction costs

Public roads (local, Maine Turnpike Authority, and Maine Department of Transportation (MDOT)) comprise some 55m square feet of impervious area of which 48m is City and private. Not exempting roadway impervious area would equate to 33% of the total rate base, and the City and private portion is 29% of that total. So the decision to include or not include roads in the calculation is a major one with the following key implications:

- Pro: It will reduce the charge per billing unit (ERU) by 33%.
- Pro: This charge allows you legally to charge for private roads.
- Pro or Con: It will shift 29% of needed revenue from the stormwater user fee to other City funding - $1.16m per year – which must be paid from either the general fund or continue to be paid from the sewer fund. It should be noted that this value is almost the exact value now paid for the current stormwater program. That is, the City will need to continue to pay this amount of stormwater cost through the road charge either through the sewer rate or the tax rate. However, the sewer fund is about to be burdened with larger support demands for the long term combined sewer overflow (CSO) control plan and adding $1.16m from that revenue source may be problematic.

Options can be defined as:

Option #1 - Do Charge for Roads: Communities that charge for roads often do so as a means to retain current City spending on stormwater and to keep the fees lower than they otherwise would be as well as creating an incentive for the City to reduce its roadway impervious area burden and provide a mechanism to charge for private roads and MDOT and Maine Turnpike roads.

Option #2 - Do Not Charge for Roads: Communities that do not charge for roads often argue that the City needs the revenue for other pressing purposes. They state that roads are common property owned by all citizens and are properly allocable on the basis of impervious area since the larger the impervious area of a property the more use of roads they are likely to make.

Option #3 - Reduced Charge for Roads: Communities that charge a reduced fee for roads argue that a part of the roadway is really a drainage system (e.g. Vermont uses 33%) plus an impervious system and only the non-drainage portion should be charged.

There are a couple ancillary thoughts that should be considered in the above three options:

- **MDOT/Turnpike:** Communities that do not charge the MDOT/Turnpike equivalent for their roads argue that MDOT/Turnpike must handle all city runoff through their system at great cost and vice versa – so the cost is about equal and no charge is applied. This argument, of course, opens up the local government for all sorts of properties claiming similar circumstances. Communities that do charge state and federal roads reason that it is consistent and fair and it will bring in a new source of revenue (though they may balk at payment) at 4% of total revenue or $160,000 per year.
- **Airports:** Some local governments look at runways, taxi ways, and the like as public roads and provide an exemption. Some do not. This exemption combined with the normal kinds of runoff treatment often reduces airport payments significantly. The airport is 854 billing units and thus would generate about 1.5% of the total revenue or about $60,000 per year.

Public Property

Policy Question: Should Portland charge for public property, and, if so, how should the City's bill for those properties be handled?

Public buildings comprise about 7.2% of the 56,814 ERUs and the annual fee would amount to about $288,000 in new charges. Exempting these buildings would increase all other stormwater bills by 7.2%.

Option #1 - Do Charge for Public Property: Most communities charge public buildings and associated impervious area the stormwater user fee just as they would any other building. One reason to do so is to allow for charging state and federal buildings on a consistent basis. United States Senate bill 3481 in 2011 clarified that federal facilities must pay stormwater user fees. But court cases have indicated that cities must typically bill themselves if they wish to bill other governmental entities.

Option #2 - Do Not Charge for Public Property: Those communities that do not charge their public buildings do so on the basis that they are "non-revenue producing" and thus have no way to raise or recover the fee amounts except through the local budgeting process. Whether this is a coherent argument in the context of rate making is unclear and has not been litigated to our knowledge. In this case local enterprise funds would pay the fee.

Option #3 - Reduced or No Charge for Certain Types of Public Property: There may be a thought process that arrives at a reduced fee or a broader exemption, though we are not aware of such an approach.

Sustainable Stormwater Funding Task Force

August 16th, 2011

Presentation

1. **Roadmap**
2. **Rate Structure**
   - Overview
   - Basic Rate Methodology
   - Residential Rate Policy
   - Roads and Public Property

Presentation

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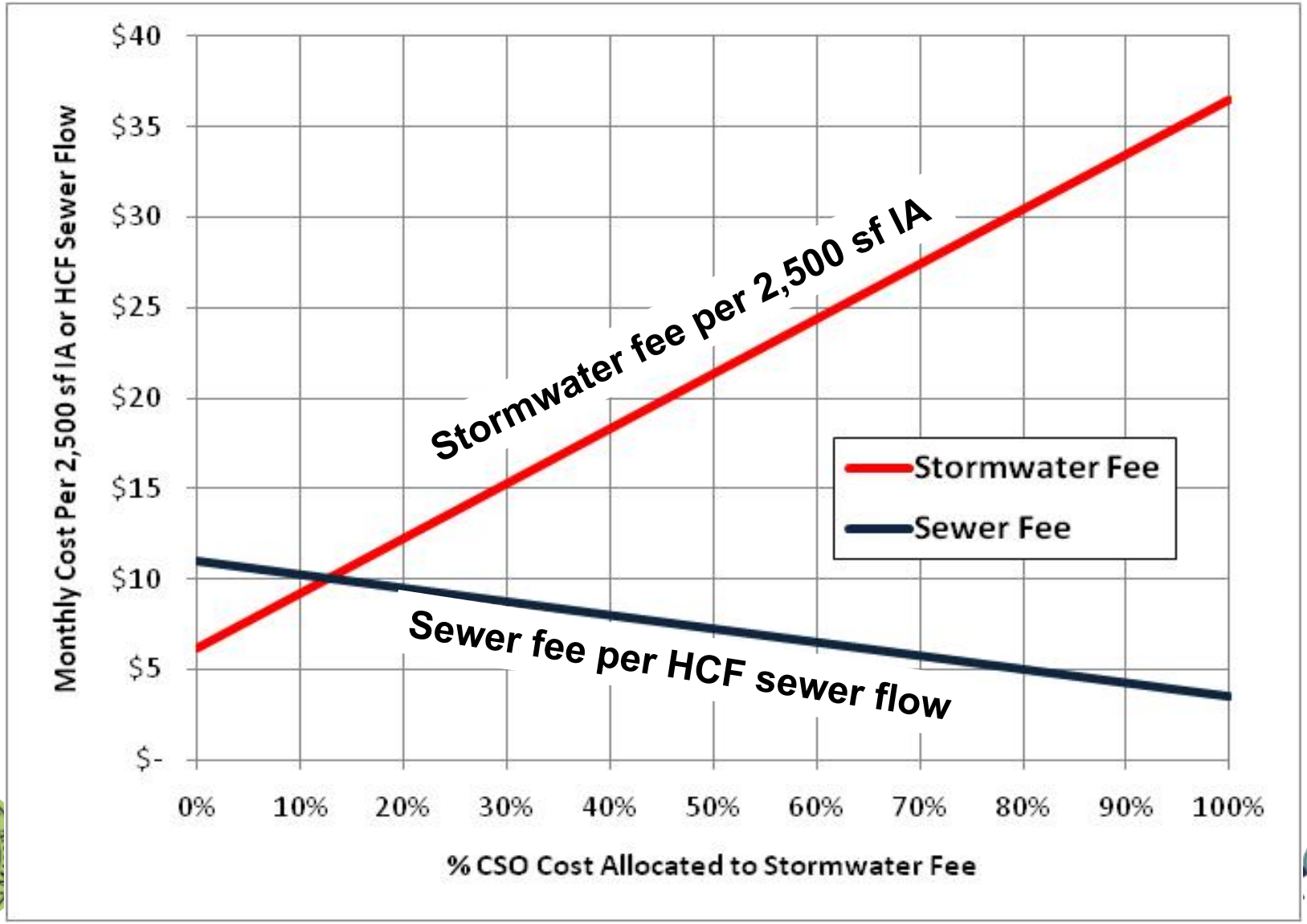
Roadmap

- **August – Rate Structure**
  - Impervious and gross area options
  - Residential options
  - Handling of roads, public property, and undeveloped land
- **September - Credits**
  - Basis for and types of credits
  - Amount of credits
- **October – Cost/Program**
  - CSO cost allocation
  - Program five-year plan
  - Functional organization
  - Appeals process
- **November - Billing**
  - Billing
  - Customer service
  - Timing and scope
  - Public Involvement
- **December- Final**
  - Final Recommendation and
  - Implementation Steps/Cost

Presentation

1. Roadmap
2. **Rate Structure**
   - Overview
   - Basic Rate Methodology
   - Residential Rate Policy
   - Roads and Public Property

Fee Level Reminder



Overview

- **Rate Structure (p.1) :**
  - Basic methodology
  - Modifiers
  - Secondary Funding methods
- **Criteria to Insure Equity/Effectiveness (p.1)**
- **Using Methodology vs. Using Credits (p.2)**
  - Shotgun vs. rifle shot

Modification Factors

- **Simplified Residential Service Fees**
- **Credits (System and Activity)**
- Base Rate for Fixed Costs of Service
- Jurisdiction or Basin-specific Rates
- Floodplain Surcharge
- Declining Block Rates
- Water Quality Impact Factor
- Development or Land Use Factor
- Level of Service Factor

Secondary Funding Methods

- Special Service Fees
- Special Assessments
- System Development Charges
- Sales and other Taxes
- Bonding
- Performance Bonds and other Sureties
- In-lieu of Construction Fees
- Impact Fees
- Developer Extension / Latecomer Fees
- Federal and State Funding
- Others?

We're skipping this in these meetings

Presentation

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Popular Rate Methodologies

- **Impervious Area (55%)**
- **Impervious Area and Gross Area (29%)**
- **Gross Area/Intensity of Development (10%)**
- **Others (6%)**
  - water meter size, flat rates, zoning class

Policy Question: Should Portland charge on the basis of :

(1) impervious area only

(2) impervious + gross area

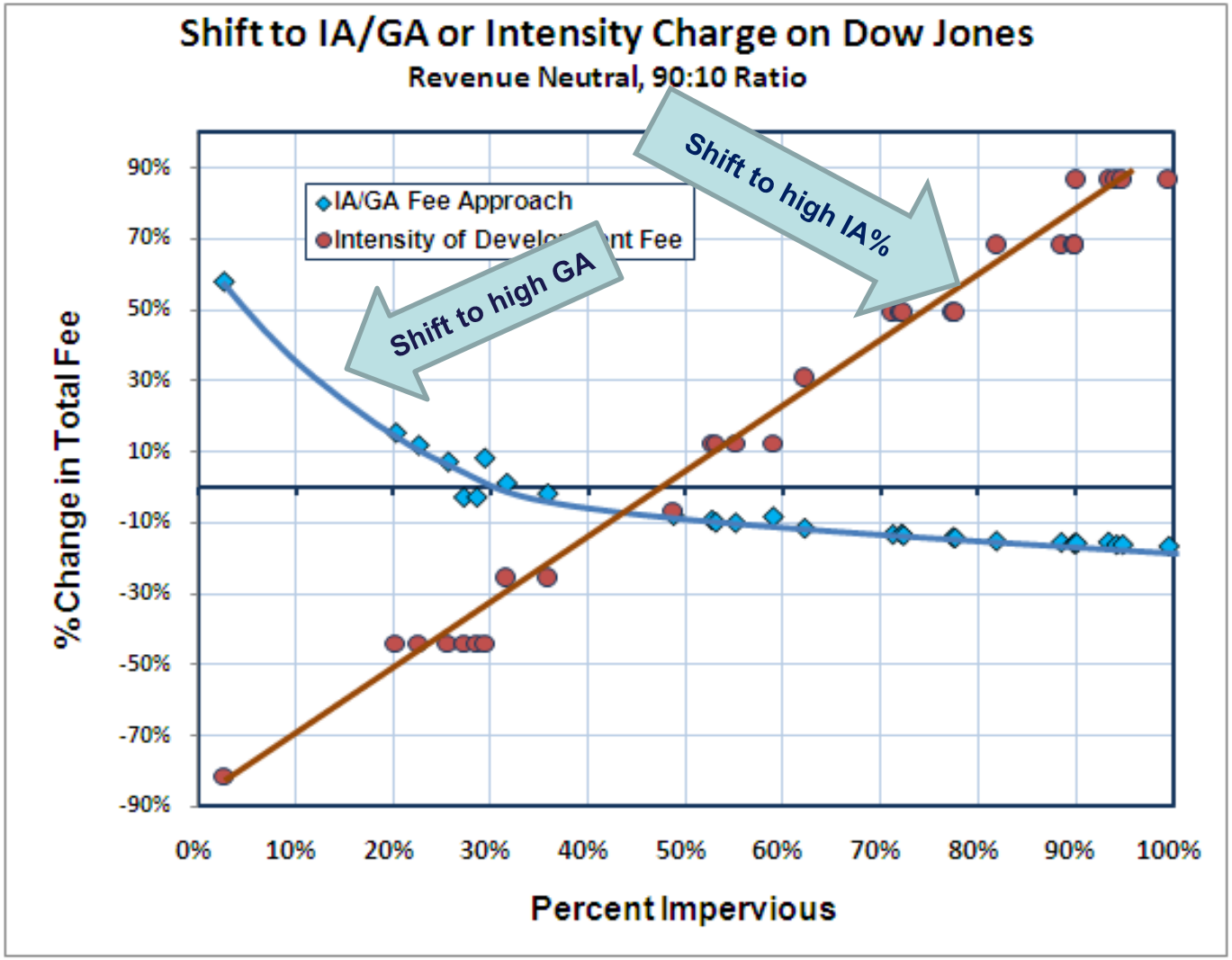
(3) gross + intensity factor to recognize green space preservation

(4) other basis

Pros and Cons (pp. 4-5)

- **IA Only**
  - Simple, intuitive
  - Court tested
  - Only deals with change not total runoff
- **GA/IA**
  - Deals with total runoff
  - Can create anomalies
  - Undeveloped land requires special attention
- **Intensity of Dev.**
  - Total open space per lot encouraged
  - Can create anomalies
- **Other**
  - Distinguish pollutants, etc.
  - EHU method can include soils in charge

Example (p.6)


Shift to IA/GA or Intensity Charge on Dow Jones
Revenue Neutral, 90:10 Ratio
IA/GA Fee Approach
Intensity of Development Fee
Shift to high IA%
Shift to high GA
% Change in Total Fee
90%
70%
50%
30%
10%
-10%
-30%
-50%
-70%
-90%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Impervious

More complex methods include:

- Allocation of charges according to program costs categories – rational nexus matching
- Allocation of cost according to pollution estimates – pollution modeling
- Allocation according to watershed or CSO and separate area
- Peak, volume and pollution charges

Ok, here's the deal.

When we get too complex four things happen:

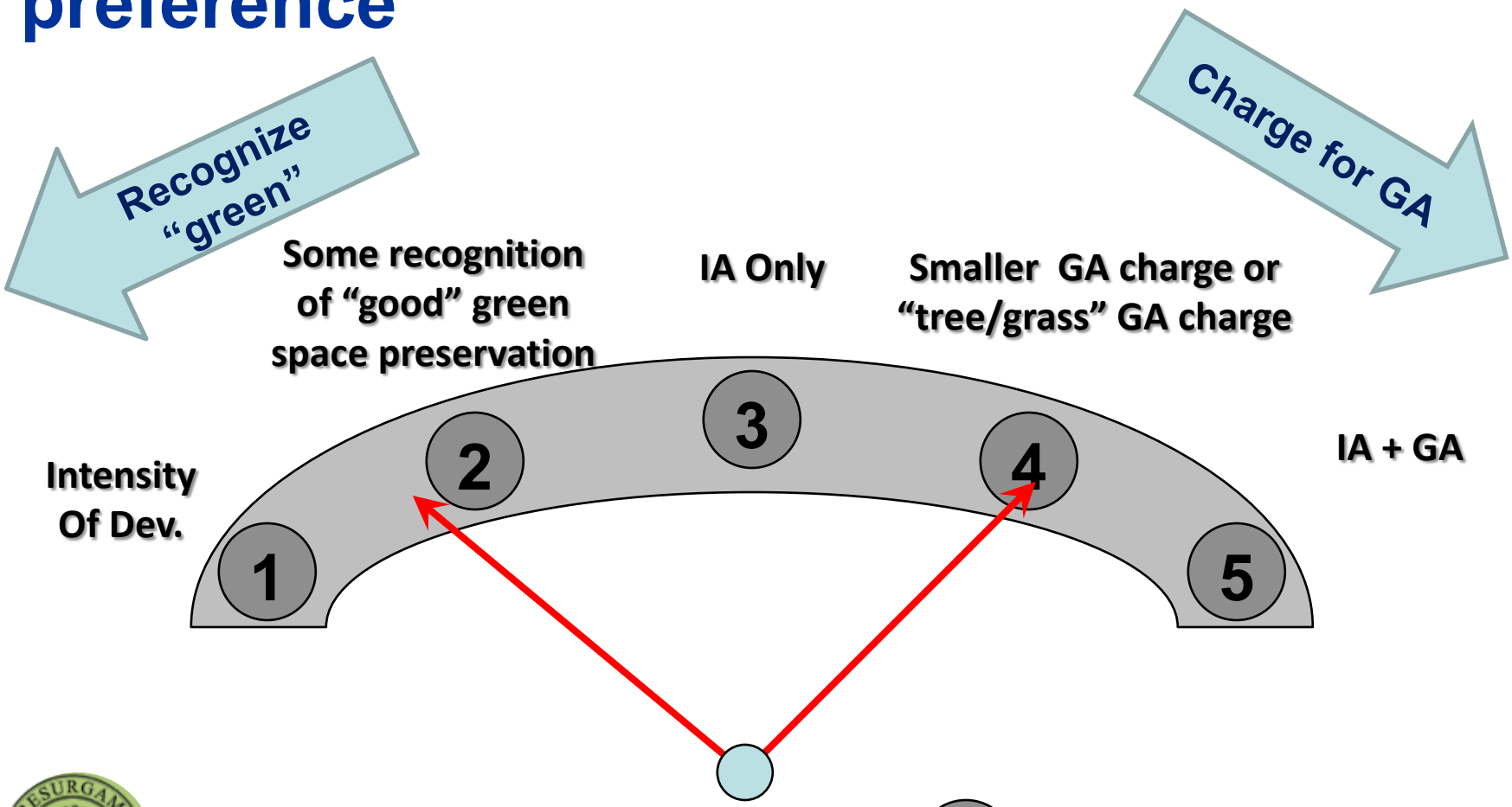
1. **its harder to explain**
2. **its costly to develop**
3. **its costly to maintain**
4. **its perceived accuracy is well beyond its actual accuracy**

Don’t forget the local “flavor”
What seems important to Portland

Variations/Thoughts

- **Not all open space is created equal**
  - Trees have 1/10th annual volume runoff as turf grass
  - Clay soils much more runoff than sandy soils
- **Must be able to be done using mapped data layers otherwise too expensive in rate methodology**
  - But can be used in credit methodology
- **Is there anything else that drives your cost you should include?**

Question 1: Right now what is your preference



6 Other or no vote

Presentation

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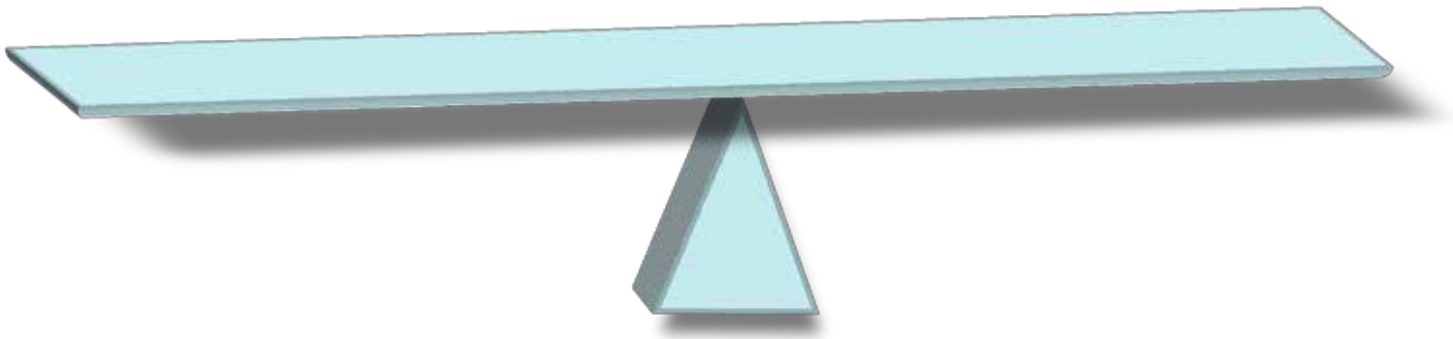
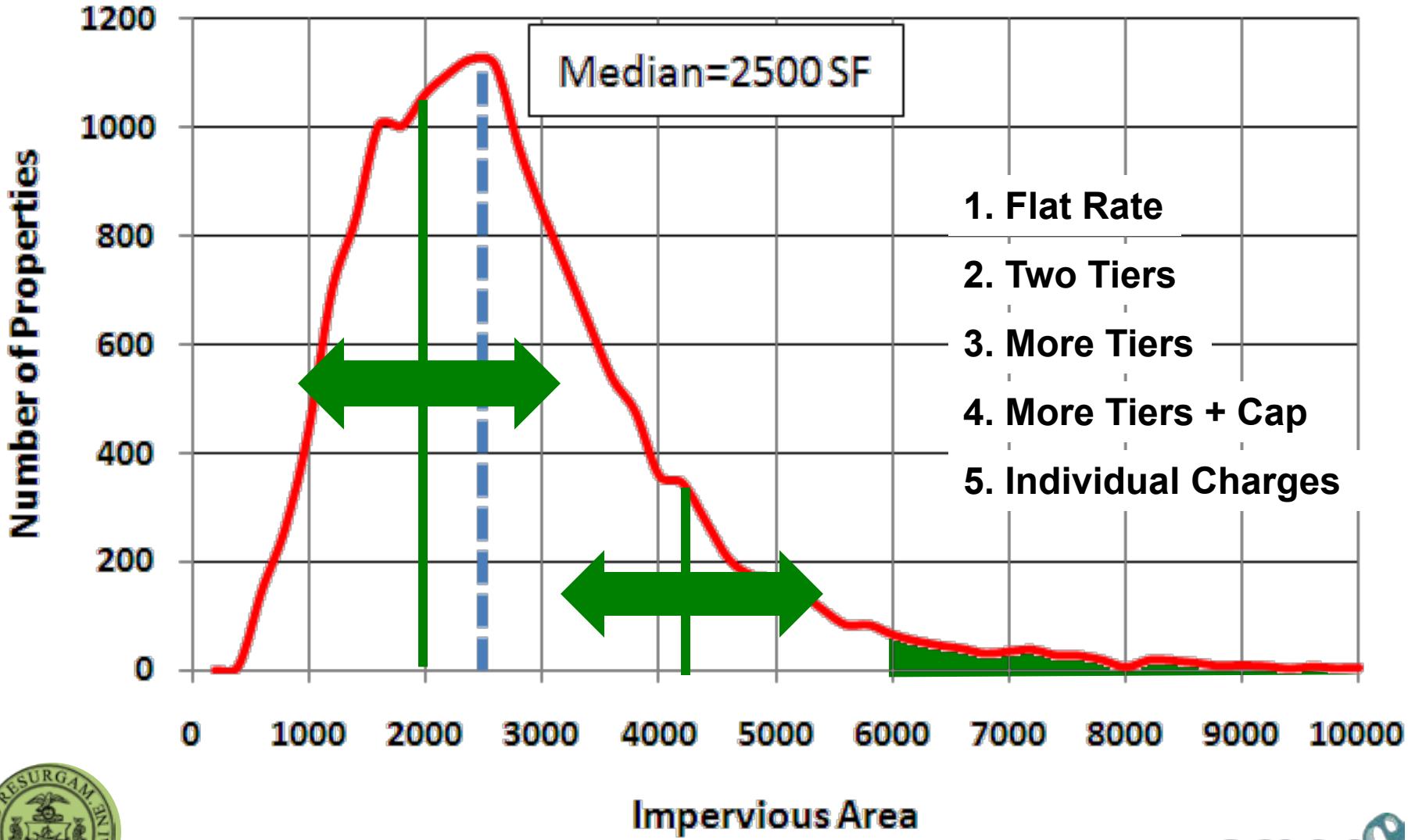
Balancing Act

One Flat Rate:
Simplicity
Low Cost
Few Errors

Measure Each:
Equity
Higher Cost
Error Count



Residential Housing Stock

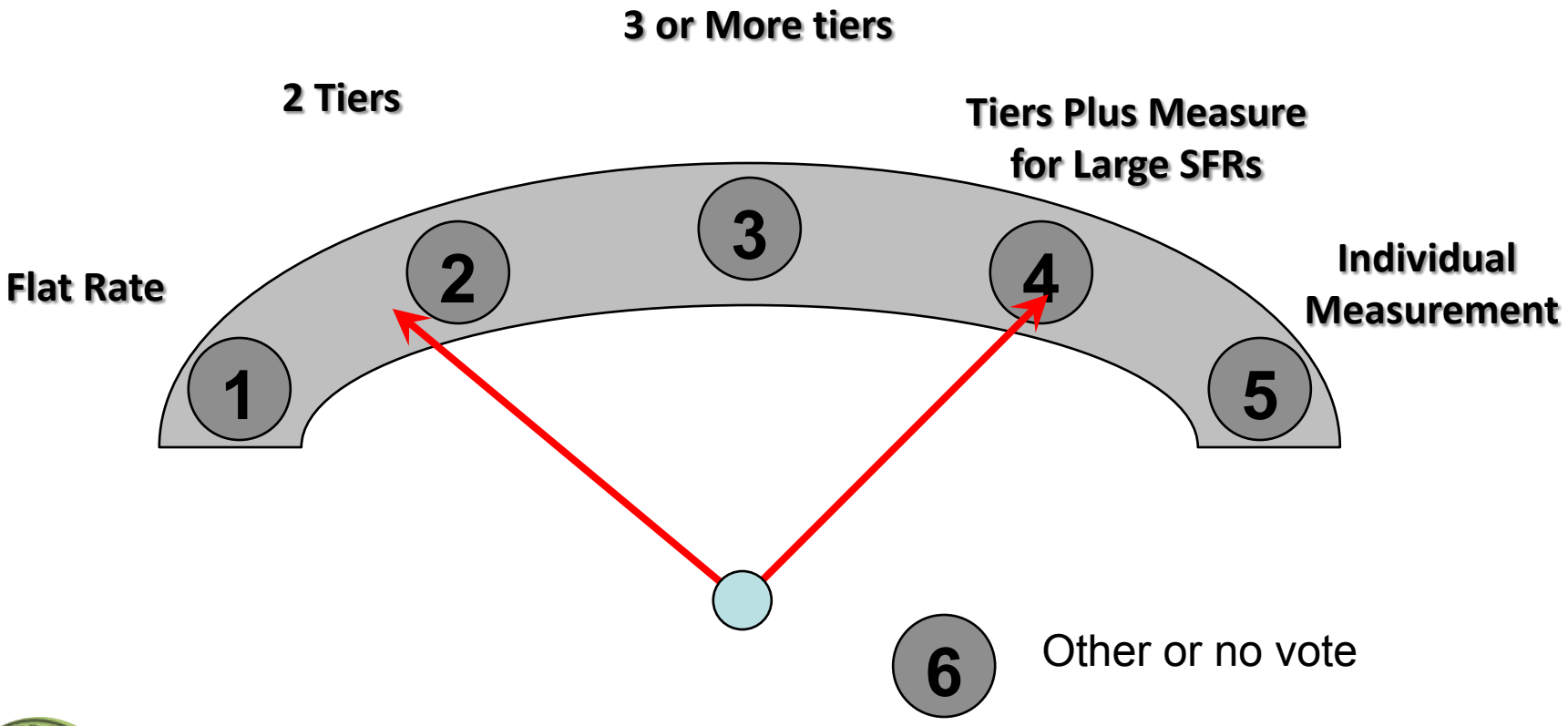


Residential Options

1. Flat Rate – simple, low cos
2. Two Tiers – more equity, s
   cost, few errors
3. Multiple tiers – more equity, **smaller jump to next tier**, more costly, more errors
4. Multiple tiers + treat very large as commercial
5. Individual measurements – most equitable, most costly, depending on unit size may be many errors (e.g. Bangor)

You can also get a smaller jump by charging per 500 square feet or some other number, but you lose the intuitive residential tier ability then.

Question 2: Your current preference for SFR treatment



Presentation

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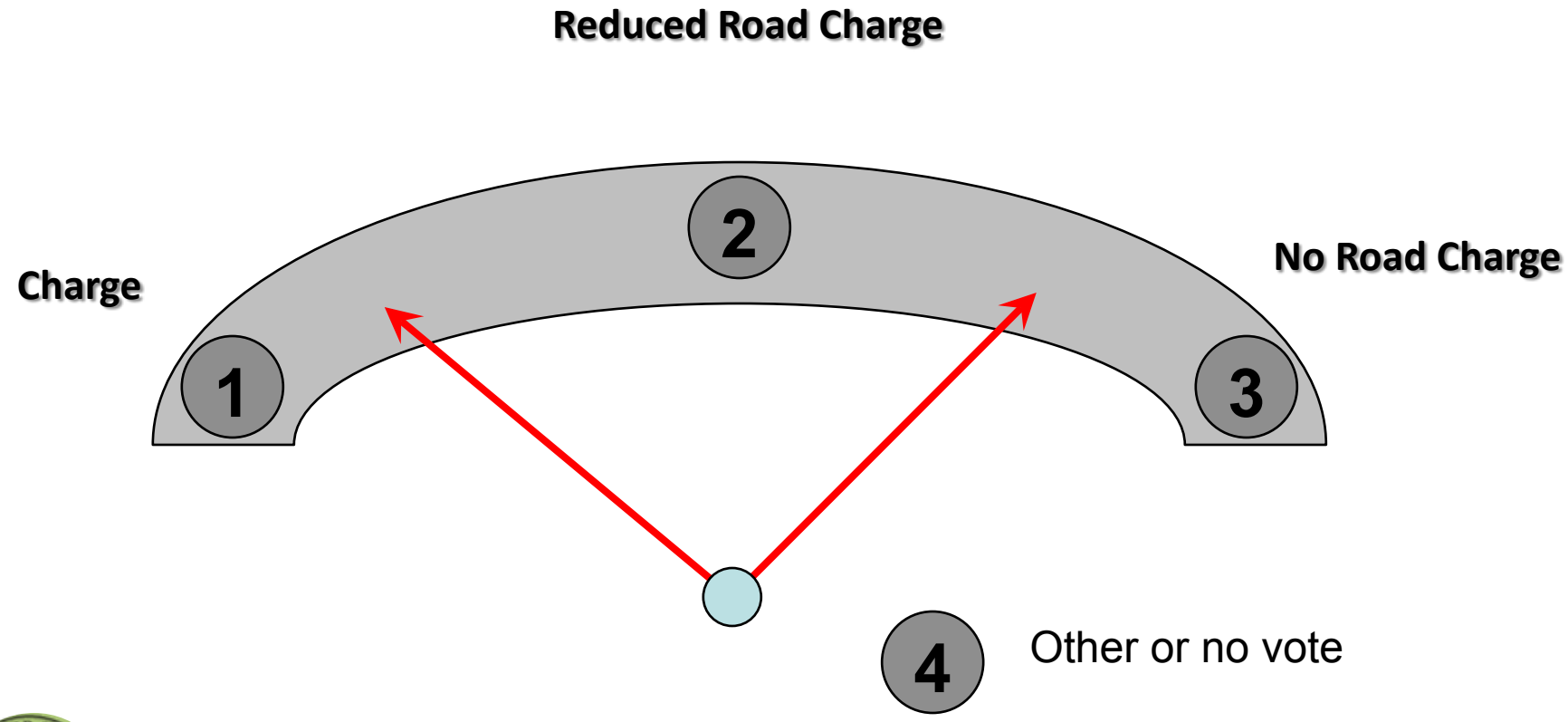
Facts About Roads

- **33% of impervious area**
  - $1.16m per year if billed
  - 4% is state and federal ($160,000/yr)
- **Current City Stormwater Costs**
  - $1.14m per year from sewer fund
- **Pros to charge:**
  - Reduces charge 33% to others
  - Can collect private and state/federal roads (!)
- **Cons to charge:**
  - Taxpayers must come up with the money: new tax or budget reductions

Question 3: Your current preference for public roads charges

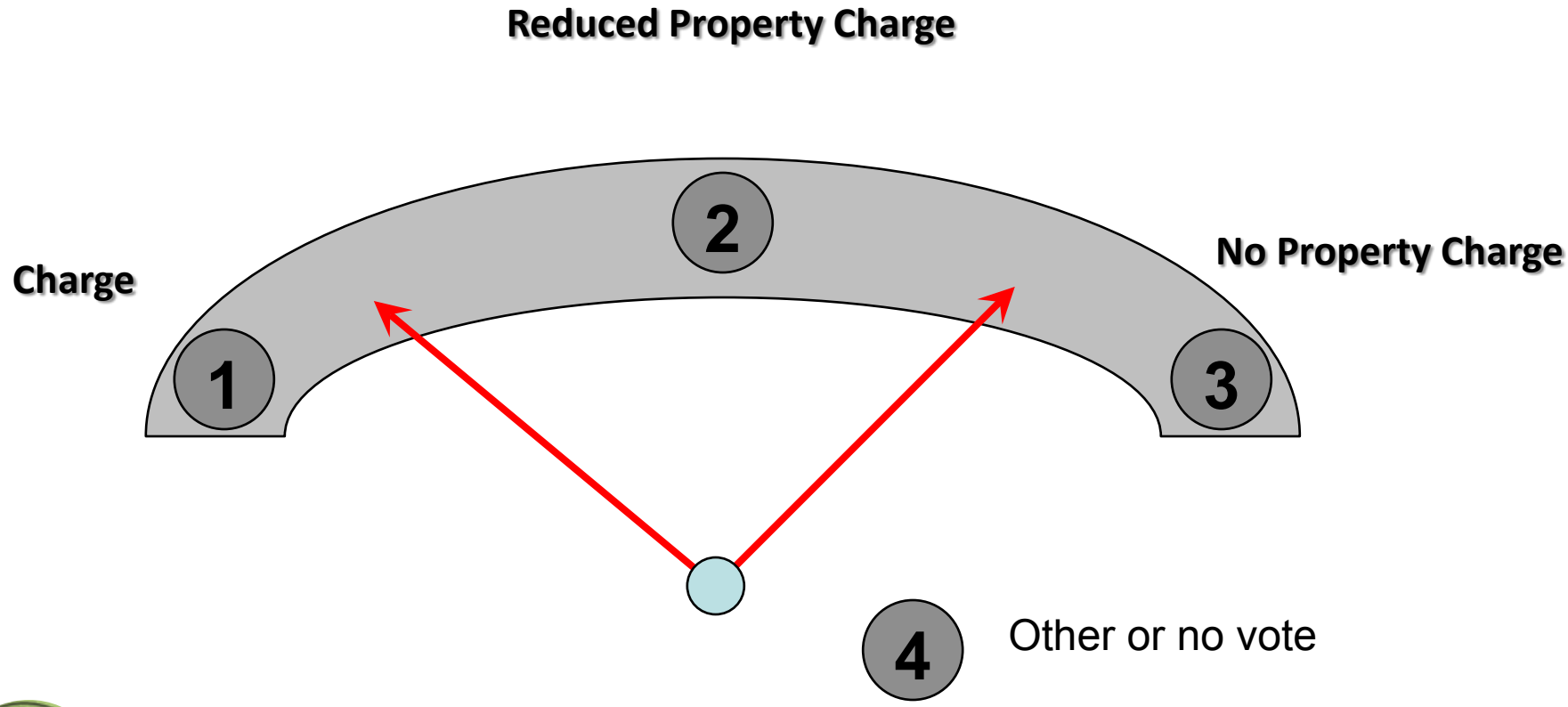


Facts About Public Buildings

- **7.2% of IA**
  - $288,000/year
- **Most do charge**
- **Some do not charge**
  - City departments are non-revenue producing
  - Say it is a “wash” and that budgeting new tax increases is a non-starter

- **Pros to charge:**
  - Consistent with rate structure
  - Allows charges for state and federal buildings
- **Cons to charge:**
  - Taxpayers must come up with the money

Question 3: Your current preference for public property charges



Policy Questions Conclusions:

1. Fee Basis
2. Single Family Residential Rate Structure
3. Handling Public Roads
4. Handling Public Property