Transcript of Dr. Robert Tupelo-Schneck Introducing Fair-share Spending

My name is Robert Tupelo-Schneck. I'm going to talk to you today about a new voting method for Participatory Budgeting. This is joint work with Robert Loring sitting here in the front.

I'm going to try to go thru this in a whirlwind 12 minutes. Please come talk to either of us later

Let me start off actually by saying that voting is a small part of the whole Participatory Budgeting process.

There is a great deal of work, months of work and organization, that go into Participatory Budgeting before the vote.

But the vote is in many ways the culmination. And it's also the way that you're going to get the most people involved. People who don't have time to go to meetings *and so come out and vote.* So I think there is a lot to be said for doing the voting a better way.

Although I'm going to take a critical stance toward voting in Chicago, and here in New York and elsewhere in the world, please don't interpret that as a criticism of those __ [processes?] and the amount of work that has gone into them.

So I'll start off by talking about issues with that voting __ and then I'll move on to our proposed new method [voting system].

So what is **the usual method**?

Every voter has some set number of votes that they allocate among the projects.

And then the projects are funded in the order of how many votes each one has until the money runs out.

So what are some of the **problems** of this?

Well first let me talk about "Tactical Voting". This means, people, rather than voting what they actually want to get, they have to *think* about how to make their vote count. Voters don't want to waste their votes. And the voting system forces them to think tactically about how to make them count rather than just allowing them to vote their sincere preferences.

A couple of **examples**:

You don't want to vote for a sure loser, that's throwing your vote away. We all know this from third parties in American presidential elections. Don't vote for third party throwing your vote away; at most it's a protest vote. The same is true in PB elections.

Less obvious perhaps is, you shouldn't vote for a sure winner! If you're absolutely sure there's enough support to get a project funded, it doesn't need extra support from *you*. So you're losing voting power if you're voting for a sure winner.

Another example is Bullet Voting. If there's one favorite project that you really want, there's an incentive to vote only for that one project — because otherwise your lower choices might get enough votes to bump your favorite out of the running.

[¿Nervous laughter?]

Well/That's, it's a shame. It'd be better to have a voting system where people can be confident that they can vote their sincere preferences, that *it won't result* in a wasted vote *and* lower preferences aren't going to hurt their favorite.

Another kind of problem that this voting system has is   it's a plurality voting system: The largest group of voters can control all of the money. If the largest group is divided, a minority can

control all the money.

Let me give you an example. Suppose we have the warm colors, 60% of the voters divided into factions of 20% each: the yellow, the red, the orange. And then we have the 40% blues.

And suppose each of them vote for 5 projects that's going to use-up all the funds. Well what happens here is that all the money goes to the 40%. And the other 60% gets nothing. They had enough votes so that their 5 projects that used-up all the money under this voting system, they get everything.

It would be better to have a proportional voting rule where, in this kind of situation, the 40% group could control about 40% of the money, and a 20% group could control about 20% of the money. [pause] So it would be better to have a system that allows that.

Now let me talk about **cost-aware** voting. The kind of voting, that was used in Chicago and is being used here in New York, doesn't *even* account for wide variations among the costs of the projects.

I'm going to take Chicago 49th Ward 2010 as an example. That's not to pick on this election, but just because it had a very interesting case. Here projects ranged from $2,600 to $230,000. That's almost the difference between pennies and dollars. But the cheap projects needed to win just as many votes as the costly projects, and a vote for a cheap project used up just as much of your voting power as a vote for the costly project.

So I *think/put it* that it would be god to look for the most cost-effective project in terms of how many voters are you satisfying with the money that you're spending. Consider not only how many voters support a project, but also its cost.

So, I'm going to go a little further with this Chicago 2010 example, and take a look at how many dollars would be spent for every vote supporting it — say the dollars per vote. So [here were projects. Here was one of the winners. They go

27 minutes

 May have saved lives.

each of those voters what they wanted.

Now if we look at the t w o projects, it got fewer votes. But it's so much cheaper, it only cost $8 to satisfy each of those voters. What a bargain! And there are more projects like this.   small projects, only $19 per voter   get them something they wanted. medium-sized project   The same amount of money used to fund that one project to satisfy 494 voters could have funded ten projects. each of which

was much more cost-effective

2363 votes Now that's not 2363 different voters, because the same voter may have voted for several of those. But that's still a lot of voter satisfaction for the money.

So, if you have a voting system that's cost aware, it will give more voters more of what they want at the same cost. and   more satisfied voters.

Alright, now I'm going to go in to talking about an alternative way of *performing* a participatory budgeting vote. Here's the core idea of Fair-share Spending.

Each voter controls an equal share of the money. And that money is used to fund that voter's favorite project.

Now some projects are going to lose. So, if a voter wants to spend money on a project that doesn't get enough support, the money moves to his or her [next favorite / backup choice]

We'll give an example.

So, here's $9000 in the green stacks on top. Each voter is allocated a $3000 share. Now let's suppose we have some projects, ranging in cost from $2000 to $4000. Each voter can now distribute his share among those projects.

(We color code our voters so we can see where things are going.) Each voter sends their money to the project they want to support.

Some projects may win right away. For instance, this first project has enough money to get funded. Not all projects can win, there's not enough money. So the least popular must lose. But voters who supported the least popular don't lose their share of the voting power. Each of those voters can move their money to their *next choice*.

So in this case, there's one project that had no supporters, it would get eliminated. The next thing that would get eliminated is project E, which relative to its cost has the least support. So Red gets that money back   to give to another project.

Next D will get eliminated. Green gets that money back   give it to another project.

Well this is an interesting case: Suppose somebody wants to support a project that already has enough money. In this case we have a surplus.

For a project that gets <u>more</u> money than it needs each voter can move a portion of their money to their next favorite choice. So it costs less to support a project that has many supporters. In this case we have three voters, each spending a thousand dollars   for something that only costs $2000. only spend two-thirds of that however to support that project. The other one-third will come back to them. So two-thirds of each voter's vote has to stay there — so $666 or so. The other   so they can more it somewhere else. ___   ___ on project C, allowing it to get enough funding to be elected.

Then finally B is eliminated and conveniently Blue

Now, in real life, of course, we can't have this long conversation with all the voters after each step   where they would like their money to go   has a surplus. So what we do is we ask each voter to rank the

So here's the vote [ballot] from District 39 in Brooklyn. It would be easy enough just to turn this into a ranked choice ballot. Rather than "Xing five projects, rank as many projects as you think you might be willing to have your share of money go to [fund/help/support].

So I [find/claim] it doesn't complicate the ballot that [too] much __. It's certainly true that the tallying is more complicated than the one I described earlier where you just list the projects in order of how many votes they [each] get and *assign* the money until the money runs out.

But this is something [a tally process] that is used throughout the world. The Fair-share Spending is a variant of a *voting system called* Single Transferable Vote, or STV. You might not have heard of STV but you might have heard of Instant Runoff Voting that's the single winner version of STV. [It's] also known as the Alternative Vote or Ranked Choice Voting.

STV is used in national elections in Ireland, Australia, the Republic of Malta. It's used widely in local elections in Scotland, New Zealand, and here in North America it's used in local elections in Cambridge, Massachusetts and Minneapolis, Minnesota.

So this voting system as applied to candidates rather than projects is rather widely used. ___

So, just to finish-up here:

What are the benefits of using a voting method like Fair-share Spending?

Fair-Share Spending is fair:
Every ballot controls the same amount of money.
The largest group can't control more than its share.
Large minority groups *can* control their shares of money.

Fair-Share Spending is cost-aware:
Fair to less-costly projects and their supporters
Promotes efficient use of money
Increases voter satisfaction per dollar spent

We hope that this will promote cost-effective projects. There's a difference between voting for something that you'd like to have and voting for something you think is worth spending the money on. And if you have a tally system, a voting method, that requires you to put money up to fund a project, we ___ that it'll encourage voters to support more cost-effective/leaner voting/projects. *and* project proposals to be more cost effective.

Fair-Share Spending is also fair to less-costly projects because it doesn't cost as much to support a $2,000 project as it does to support a $200,000 project.

And we can hope / anticipated this will increase the voter satisfaction per dollar spent.

Votes for unpopular projects aren't wasted, and votes for popular projects cost less
Less incentive for tactical voting
It also means that more votes go into the winning set of projects. Maybe your first or second choice didn't get funded, but maybe your third, or forth [*and]* fifth choice did.
This means a stronger mandate for the final decision

Finally, voters know that their vote counts
Literally: their ballot controls a fair share of the money

With these benefits, we can hope that a better voting __ increase voter turnout and satisfaction and perhaps in turn to encourage more officials to entrust Participatory Budgeting with more money in more cities.

Finally let me point-out that voting reform is very difficult. Anybody who has thought about third-party politics here in North America knows that it is going to be very difficult to make any change in how our [federal or state] elections work. Unfair systems have been entrenched by centuries of use; *it's very hard to change* __

But participatory budgeting is still young, we have a unique opportunity to introduce better voting methods now – voting methods that are more expressive and more fair.

Thank you.

Applause