

# 2012 GeoDesign Summit: Closing Remarks

Esri president and founder Jack Dangermond shares his closing thoughts about the 2012 GeoDesign Summit.

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## Video Transcription

**00:01** We have some...a couple of closing thoughts.

**00:03** First, I want to say thank you all for coming and spending the time that you did.

**00:09** Do you think this was a good conference? [Applause] It was very good.

**00:13** I think so too. Yep. I want to thank all of the organizers for this.

**00:19** I have a couple of simple words and then some thoughts about what do we do next.

**00:24** The simple words are, this is an interesting community that's starting to emerge.

**00:29** That's what I would call it. I'm not sure if it's a profession or a trend or...I don't exactly know how we'd characterize it.

**00:36** But the big goal for me that is coming into being is that there's a community that's being established...

**00:43** ...of friends and colleagues around the world that know at least about...something about geodesign.

**00:50** And that's going to continue on, I think. Don't you think it'll continue on?

**00:54** I mean, we have some books coming out, we have papers, we have colleagues...

**00:59** ...we have new thinking, we have real projects under way, and I think that's very healthy.

**01:07** The question I have is what about next...what do we do next to really accelerate this or move this or...

**01:15** ...drive it in the direction that you want to do? And I don't have exactly an answer.

**01:20** The first question, that is very practical, is, should we do this again next year, and if so, where?

**01:27** So how many of you would come to this next year, if we did it again?

**01:34** And then, where should we do it? We have three proposals...

**01:39** ...repeat it again here, do it in Minnesota, or do it in the Boston region.

**01:44** These are all suggestions that are valid, so let's go down the block. Think for a moment. Where do you want to do it?

**01:54** [Inaudible audience comment]

**01:55** Oh, I see. He said, It depends upon what season.

**02:00** [Inaudible audience comments]

**02:04** Or Cambridge. So January's a bad time? Is January a bad time for it? Yes...No.

**02:13** [Inaudible audience comment]

**02:14** But only here. Right.

**02:19** So who would like to do it in Boston next year?

**02:23** Who would like to do it in Minnesota next year? Okay, so we got three. Are you guys from Minnesota?

**02:33** Who would like to do it here again next year? Okay. Well, if it's okay, we'll just do it again here.

**02:42** We will sponsor it again. We'll do it according to the same sort of format. If it's okay with you guys, we'll do that.

**02:51** Then I think what I'd like to do next is something that's a little less practical...

**02:56** ...is have Carl and Tom and perhaps you, Steve, and some others...

**03:01** ...talk openly about what do we do next with respect to the agenda of pushing this along.

**03:08** I mean, we have an agenda of pushing it along in private practice, we have an agenda of pushing it along in academia...

**03:19** ...with curriculum and programs, we have an agenda of pushing it along in the research community...

**03:26** ...we have agendas about pushing it along with enabling technologies, tool building...

**03:32** ...building on some of the stuff that Steve had...

**03:36** ...these are all thoughts that occur in my mind about what do we do next. And there's probably others.

**03:42** So...how many of you want to push these agendas along? Let me just ask that.

**03:48** How many of you think this is not worthwhile? Okay. Well. Let's talk about those four.

**03:57** And Carl, you want to start off with the research agenda?

**04:02** Is this on? I'm a little older and less patient, and to me...and a little bit perhaps hard-headed...but my priorities are two.

**04:21** One, I'm less interested in the professionals...

**04:24** ...because you think you know what you're doing, and you're doing it, and you're getting

paid...

**04:27** ...and keep doing it. I'm interested in the next generation.

**04:32** And therefore I'm interested first and foremost in what's the educational structure.

**04:37** How do you organize it? Is it a cartel, is it a competition, is it a chaos? I don't want 50 years of experimentation...

**04:47** ...before you figure out what you're doing. I want 2 years of experimentation before you figure out what you're doing...

**04:55** ...and then I want diversity, but not too much.

**04:58** So one of my priorities would be, Jack has given, or the company has given, support to let's say, a hundred universities...

**05:08** ...I don't know what the number is. Maybe five hundred around the world. That e-mail goes to every dean...

**05:14** ...the dean is told, get somebody here from your university, and the deans have a cartel meeting...

**05:20** ...and they decide whether they're going to compete, and if so how, and you make your deals on the second day. Okay.

**05:26** And there're variations of those. You run it like the United Kingdom runs competitions for seed money.

**05:32** You put a hundred people in the room, and they negotiate with each other, and different plans come out...

**05:38** ...and you fund the ones that you think are interesting, and you don't fund the ones that are not...

**05:43** ...and a group of people makes that decision. It's basically like those business television programs.

**05:48** And you got 48 hours to make the deal. Period. So that's one of my priorities.

**05:53** The second priority relates to that, but I really think that we don't know that much about what we're doing.

**06:02** Let me give you some examples that various of the presentations brought up...

**06:08** ...but in a way that you might not find that happy.

**06:12** Supposing that you have a group of people at a university or across universities...

**06:18** ...some of which are very capable of working at one scale...

**06:22** ...and they need the help of somebody who's very capable, but who works at another scale.

**06:29** What are the methods by which design can be done at several scales simultaneously? Not

serially but simultaneously?

**06:38** And what are the methods of design that have to be invented?

**06:42** And I've had...we know very little about that. We have no case studies, we have no observational work...

**06:48** ...and I think there's actually fundamental research that has to be done.

**06:53** So I would say my second priority is, Let's figure out what the questions are...

**06:57** ...and let's figure out how to organize to do the fundamental research, some of which might involve practice...

**07:03** ...and some of which might involve universities and various consortia.

**07:06** And if you solve those two problems, the next generation might be okay.

**07:11** If you don't solve those problems, you've got a disaster.

**07:15** Can I just pick up on that. I mean, in the last couple of years, we've talked about going to National Science Foundation...

**07:24** ...and asking for research funding. And I think these last couple of years have evolved and brought into focus...

**07:32** ...what the actual research agenda might be that we propose. And that might be a multiuniversity collaboration...

**07:41** ...where there's a leader and there's pieces of it going on, perhaps at different scales or along different themes, but...

**07:49** ...Tom, you want to speak to this?

**07:50** I think Tom's...I think your presentation at the beginning of your session was exactly correct.

**07:55** And the support for those kinds of structures...those have to, they have to lock, okay, but there are lots of different models.

**08:02** Right, but...

**08:03** ...and I agree with that. I think the one thing I would add, and I think that would maybe appeal to NSF or to foundations...

**08:10** ...is to take on some global challenges.

**08:13** So in addition to talking about the tool, and the way in which we think about design...

**08:17** ...is to take on an issue--climate change, water scarcity, whatever--and go to a foundation and make the meeting about a topic...

**08:28** ...using geodesign as the way to talk about it.

**08:31** Okay, let me throw something out and see if the group buys into this notion.

**08:38** The UN and our own country have made a big policy shift...I don't know if you've noticed it...in the last 18 months.

**08:45** This large policy shift is from trying to mitigate or change climate change processes to adaptation.

**08:55** Did you know this? This is radical.

**08:58** I went to Geneva last summer, and I was...there was a conference of maybe five or six hundred people...

**09:04** ...they were no longer talking about stopping or...no, they were saying, Okay, how are we going to mitigate it.

**09:08** So the policy shift has happened. So if there was a research proposal that talked at multiple scales...

**09:16** ...about adaptation to climate change--in short--mountains and shore...all of it...

**09:27** ...and laid out a series of methods and responses to that...

**09:30** ...we would get a lot of attention, I think, or you would get a lot of attention from the US federal government but also the UN...

**09:37** ...and probably all the research domains...the National Academy, NSF, and the like.

**09:42** So I would say, if...Carl, if you asked me to take on number one, which is to get multiple deans here...

**09:52** ...and Bill, we can work on this, and David, then, I would ask that you take on the leadership with respect to...

**10:00** ...bringing a consortium together of people that would write such a series of white papers...

**10:04** ...do the brown bags at NSF, et cetera, to do this...how many people would help Tom in doing this...

**10:11** ...or your universities would be genuinely interested in this?

**10:15** [Audience question] Could you clarify though...the issue of adaptation is not in lieu of proactive [inaudible] the environment.

**10:23** Oh, no, no, no, no, I'm just talking about what is the subject. Okay.

**10:27** I want to sell this to a willing audience that has money to pay.

**10:33** [Audience question] Could you clarify something, though?

**10:34** Yeah.

**10:35** There's this Google existence that's indicated as far as a curriculum...there's this Google Earth...

**10:42** ...there's these tools that are available with a different dynamic and a different business

model.

**10:48** How do you relate to sharing the goal of geodesign with Google? To me, you have tremendous power and capability...

**10:58** ...and awesomeness...this is my first time here...but in a sense, Google also does that, okay, and...

**11:05** ...I would like to see the geodesign a full spectrum, to the total population, not restricted to lead what you don't control.

**11:15** Well, that's the case, so far.

**11:16** So from a dynamic standpoint, to this point, there seems to be a whole lot of control.

**11:20** Okay, let me go back to that in just a moment. First I want to talk about number two...

**11:24** ...which is what are the objectives that we've got to come out of here. I don't really care what technology is used.

**11:32** Is a research agenda about geodesign that actually winds up in 12 or 18 months with significant funding...

**11:43** ...to support this multiscale experiment like we did last summer or like we did last winter on the City of Redlands...

**11:53** ...but expanded to multiple universities. That will get real attention.

**12:00** And Ron Abler, the person who got the National Science Foundation grant for Santa Barbara for geography...

**12:07** ...changed the entire world of our field, pushed that for year after year with Duane Marble to get that funding.

**12:16** Once that funding was there, the academy changed. GIS and geography changed in the academy.

**12:21** So that's what I'm hunting for here with respect to linking the science and the stuff together.

**12:29** But don't you think that if we...I mean, as designers, we work best when there's a problem...

**12:34** ...and to take the Redlands model but to go at a much greater scale, take on adaptation to climate change, maybe, at a reasonable scale...

**12:42** ...and then discover what geodesign is through the thinking and working on that problem.

**12:49** Yeah. The third big one for me is professional ingestion, right?

**13:02** And for that, I think, the very first year, we had APA and ASLA here represented. They were not here, now.

**13:09** And I think getting to those associations as mechanisms...

**13:13** ...to talk about both the research that you did in Redlands, for example, or the...

**13:19** ...those of you in private practice, to share the research examples that you're carrying out...

**13:25** ...so that other people in your professions--architecture, landscape, and planning--could see it, would be pretty amazing.

**13:33** With respect...

**13:34** Let me answer. Yeah, go ahead. I'm not the middle of the world, okay, but I have thought about the problem.

**13:42** The audience that's really missing is the scientists. And I'm actually...

**13:48** ...I'd be actually quite interested to teach a bunch of scientists.

**13:54** I've done it, but in a collaboration. But the deans that ought to be here are not design school deans.

**14:02** They ought to be deans, alright, and see who comes.

**14:07** And the deals that have to be made are sometimes inside a university, but...

**14:12** ...sometimes maybe it's the hydrology department. I worked with Tom Maddock in Arizona...

**14:17** ...because my school doesn't have a hydrology department. It was terrific.

**14:22** So why shouldn't a science department in one school work with a design department in another school?

**14:27** Yeah.

**14:28** And so the audience, I think, has to be broadened. And by the way, let me say something else. Last thing for me.

**14:35** The reason I put those three scales on, and not the globe, and not the nanotechnology, is because...

**14:42** ...the direction of education goes this way, from the sciences and the design.

**14:46** Those are the intersection that makes the most effective, easy collaboration...

**14:52** ...and in my political view, the most effective change in the world. So it's not that I don't know how to do it...

**15:00** ...and I don't, necessarily, and it's not that I'm not interested--I'm not, necessarily...

**15:05** ...but I think I'm more interested in the scales where effective collaboration and change can be actually implemented.

**15:13** That's why I think you need to limit to some extent what you're going to do, or at least prioritize.

**15:19** But, Carl, the only way I think we're going to get other deans from the sciences here, is if there's a big pot of money...

**15:25** ...or a big challenge that we're working on.

**15:26** No. They owe it, because he's been supporting them in GIS software for 15 to 20 years. That's a quid pro quo, as far as I'm concerned.

**15:36** Well, the International Users Conference, which is not geodesign...

**15:40** Okay, that could happen in the summer, by the way...

**15:42** It could be this summer that we try to bring them together, and David, think about this as an event, rather than here...

**15:49** ...because there we have actually the full spectrum...

**15:52** It may be the right place.

**15:53** ...and there'll be about a thousand academics there this summer.

**15:56** Sometimes there's deans, but often it's the department heads and practitioners.

**16:00** Fine, at least somebody who's alive and well.

**16:03** Yeah. So let us explore that. With respect to the technology, there's a thousand authors of this.

**16:10** It's happening in open source technology, it's happening at Google...

**16:14** ...it's happening in Autodesk, it's happening at Bentley.

**16:16** This is one place it's also happening. And that's going to take on a natural life of evolution.

**16:23** We're interested in our own little world of getting input and criticism about the handicaps, and so are they.

**16:31** And they're all tool builders...and the open source community, who often leads on new initiatives...

**16:39** ...and new research areas, is also very active in this same space.

**16:44** So we'll do our part, they will do their part.

**16:47** I don't think that it's so necessary to bring all the leaders of technology together...

**16:54** ...in some ways, you want them competing with each other, to use all the private market mechanisms to continue going.

**17:03** What we do is share virtually everything that we develop here--these videos are shared...

**17:09** ...and those of you who've been here in the past and even in this conference...

**17:14** ...you've seen other technologies besides Esri's shown and used and pushing.

**17:18** So I'm interested not just in us doing this...I'm interested in promoting the industry.

**17:25** But I think it's an enabling part of this whole deal, it's not the fundamental driver.

**17:39** We have a question. Yes, right.

**17:41** Is this on? It's not so much a question, Jack. I've actually migrated up to being the dean level over a long period of time...

**17:51** My God, you're a dean?! My God.

**17:53** Yes. That's what I said. That's what the faculty say, too, so. But the point being that...

**18:02** ...and I want to go back to the original GIS, the original conferences. It wasn't the deans that did this...it was faculty.

**18:08** This is built on interested faculty. Now I'm not saying leaders shouldn't be here...

**18:13** ...but a lot of those leaders really don't understand what's going on.

**18:19** They're not going to be able to come here and put together a real white paper of what that research ought to be...

**18:25** ...because half the time they're out trying to get money...they're in the...

**18:29** ...the researchers are the real ground where this hits the ground.

**18:32** So I think the call should be to the real researchers who are interested in geodesign at any particular scale.

**18:41** I look at that globe, right now, and you'd mentioned earlier to me today, we were talking about climate change...

**18:47** ...global warming, sea-level rise.

**18:48** There are these things that come along, that are such massive scale, that we're going to end up...

**18:56** ...you're not going to be able to ameliorate those.

**18:58** There's going to be some stuff that really occurs. I come from Florida. I was going to do that...

**19:03** ...here's a nice interesting geodesign question...and it was the sea-level rise.

**19:08** Use a trillion dollars' worth of property in Florida and a relatively small sea-level rise, so...

**19:13** ...these questions, these big-picture questions and small-picture questions, if geodesign is really going to be successful...

**19:20** ...and if Steve's future comes out, it's going to have to move across multiple scales.

**19:25** And I agree with Carl, the problem with education is that our silos are built to stay in scales.

**19:31** The professions, and the way the professions work with licensure, are built to stay in silos.

**19:38** And the reality of this is, we're going to either formulate a different way...

**19:41** ...and maybe geodesign is that thing, to change the way we do business, or we're really going

to have to try to figure out...

**19:49** ...what really, what the really big problems are, and not...and if they go nonlinear on us, we're going to be in a real problem.

**19:56** So it's not the deans. The deans aren't the research people who drive what's going on.

**20:01** You can beg them for money--they may be able to give you money and that kind of stuff...

**20:04** ...but they're not going to drive it. I think you want to get the scientists. I agree with Carl.

**20:09** I think the missing group here is scientists. I am a scientist, but I'm also a planner and a quasi-designer, I guess.

**20:16** Maybe at the Users Conference this summer, and working with our staff, now we try to bring together a consortium of...

**20:22** Right, I think if the Users Conference started to bring in part of this too.

**20:26** You've got 14,000 people who show up who really have some general kind of interest in this. That would be a really...

**20:32** They're all technically literate, and they're basically, they're policy people.

**20:36** Right.

**20:38** I have two last things I want to mention. The first one is, who asked about getting a job? Whether there'd be a job? Was that you?

**20:48** Right. That's a big agenda, and my real experience is that people actually who can come up with creative solutions...

**21:01** ...to problems always have a job. Tim, you ever notice that? They always have a job!

**21:06** I'm hunting for these people every day. Once in a while they show up in my office.

**21:12** I try to hire them very quickly, because they solve problems...

**21:16** ...and geo problem solving is the way that that's going to be made.

**21:22** Right now, it's kind of lousy, that people do do solving of problems about geography.

**21:29** If we can incrementally get them to solve their problems better...

**21:34** ...using science and information and rational thinking...

**21:37** ...and all the things that we believe in, then I think we can actually create a sustainable future.

**21:43** And that isn't sort of like coming from bull, that's coming from a real worry that it isn't going to work out.

**21:51** I mean, doesn't kind of get you once in a while, that it probably won't work out? Right now, it ain't going to work out...

**21:58** ...unless we make some changes. So I mean, every ounce of my time...

**22:03** ...this little ugly cloud is lurking in the back of my head, and it bothers me, a lot.

**22:11** And I suppose consciously or unconsciously, it's lurking in your head, isn't it?

**22:16** So it'd be interesting if we could simply be able to articulate what we're up to in that context.

**22:24** Because then I think there'll be all the jobs that we could ever imagine, if we can actually get it right.

**22:36** Don't worry about getting jobs, is another way to say it.

**22:39** That actually isn't the way the real world works. People that create and design and solve problems...

**22:48** ...when they show up on the scene, they go right to the top.

**22:53** So equipping those people, billing those people--I'm with Carl...

**22:57** ...we have to focus on, especially those of you who are educators...

**23:01** ...building those kind of machines that come out to create the future. That's my thought.

**23:07** I don't really think I want to talk about anything else. I want to say thank you again.

**23:10** In closing, I want to thank Shannon and Bill...

**23:14** ...and all of that geodesign team, Eric, here, personally, they've done a nice job, don't you think?

**23:29** And I want to thank you. Isn't it stimulating to be together? I mean, so many of you have said...

**23:33** ...Wow, this is a very interesting conference. It isn't sort of the normal conference. That's because of you...

**23:40** ...and your willingness and openness to share and work together and collaborate in doing that as well.

**23:46** So it's great. Thank you. I guess I will say, See you next year, and enjoy yourself.

**23:53** Stay in touch. It's been very good. Thanks. Thank you.