Alive!

Club
LOS ANGELES

INFORMATION TECHNOLOGY AGENCY

TECH on the RISE

From bringing fiber and wireless to every City facility and house, to revamping the 311 call center, City phones, Channel 35 and much more, ITA has a very ambitious plan in place to upgrade the City's technology.

Get the details starting on page 24.

ITA

Steve Reneker, General Manager, ITA, in the department's security operations center in City Hall East.

Alive! photo by Summy Lam

Public Works' **TEAM Awards**

See the winners!   Page 11
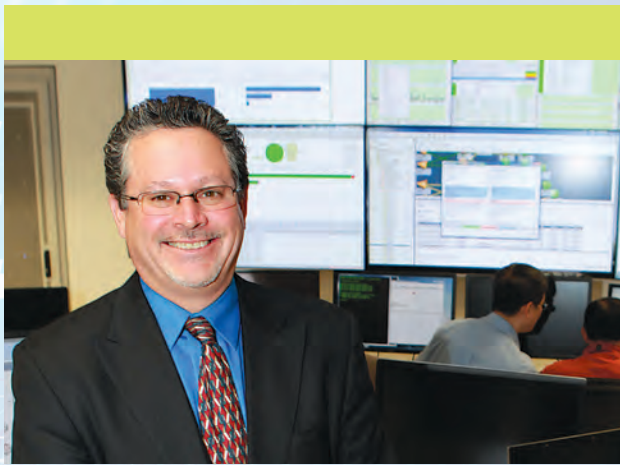
ALIVE! FEATURE

ITA

INFORMATION TECHNOLOGY AGENCY

TeCH
on the
RISe

From fiber broadband to every City facility and residence ... to a revamped 311 call system ... to systems in the cloud, to finally saying goodbye to Windows XP: ITA and its new General Manager, Steve Reneker, have an ambitious plan for renewing the City's technology.

Photos by Angel Gomez, Club Sales Director

The City's Information Technology Agency is charging into 2014 with a broad, ambitious plan to upgrade a number of key technology areas in the City. The plan is being spearheaded by new General Manager Steve Reneker.

Six strategic initiatives form the framework for priorities the ITA sets, decisions that are made, and projects that are pursued. These initiatives are infrastructure, operational efficiency and alignment of departmental priorities, security, standards, integration and digital inclusion.

The City is embracing technology at a rapid pace as the ITA pursues its goals of rebuilding its infrastructure and enhancing its abilities to innovate. Some of the exciting projects the ITA is pursuing for the non-proprietary departments and the community include:

- Fiber to all City-owned facilities
- City phone replacement with a new City Standard Voice Over IP (VOIP) solution
- New Customer Relationship Management (CRM) for 311
- City-wide software and hardware standards
- Migration from the IBM mainframe to a more cost-effective open systems environment
- Broadband connectivity to every City of LA household to ensure affordable access
- City cell phone user transition to Android and IOS platforms to begin mobile app standardization
- ITA data center reconstruction to be a state of the art private cloud with best in class disaster recovery
- Open Data Initiative for transparency and for entrepreneurs looking to develop applications
- Cooperation with nonprofits to build a digital inclusion program to provide low cost PCs to low-income households
- Cyber security enhancement initiatives through the creation of a Chief Information Security Officer, and hardened network and Web hosting environments, and tools to manage policies.

A B O U T
Steve Reneker

Steve Reneker has been the General Manager and Chief Technology Officer for the Information Technology Agency since January 2013. Prior to that, he served as Chief Innovation Officer (CIO) for the City of Riverside and Executive Director for SmartRiverside, a nonprofit organization since 2005.

Prior to joining the city he worked for Dell in business development, and has worked in IT for more than 30 years at the county of Riverside, the city of Aurora in Colorado, Eastern Municipal Water District and the City of Los Angeles's ITA, where he began his career in the 1980s. He graduated from Cal State San Bernardino with a Bachelor of Science degree in management science and was born and raised in Riverside.

How is ITA going to accomplish all that?

Big Plans

On Feb. 13, Club CEO John Hawkins and *Alive!* editor John Burnes interviewed ITA General Manager Steve Reneker in the ITA conference room in City Hall East — Ed.

Hi Steve, thanks for meeting us today. You used to work in the the precursor to ITA back in the 1980s. You're coming back home in a way. Is there any way to compare where the City was then to where it is now?

STEVE RENEKER: Well actually it's funny because probably about 40 of the people who are still here were interns back in the time that I was here, which is good thing. It shows how effective some of our student intern programs worked back then, and I'm taking a look at trying to start some of those up again because we are entering a period where there's going to be a lot of retirements that are going to create a lot of opportunities for new students in this area.

Were you given a mandate for a vision that the mayor or the City Council would like you to achieve?

STEVE: Two things that were in the works before I got here were to redesign and revamp the LA City Website and then also to introduce the first City-wide mobile app for all of our core services. My LA 311 is available in the Apple and Android stores.

I'm using it now. I was always calling 311 because I live in the City of LA; we'll have graffiti on the sidewalk or a trash can issue, but I can never get 311 because I'm usually calling outside of the hours of its operation. It used to be 24/7.

STEVE: It did. In the economic downturn when the City downsized about 30 to 40 percent, it impacted 311. It went from 24/7 to now an 8 to 4:45 p.m. operation seven days a week.

But with the app, it's even easier because then I don't have to wait on hold. When I find some graffiti in my neighborhood, I'll be able to take a picture of it, and then just send it in and see what happens. Right?

STEVE: Yes! I encourage everybody to do that.

Do I get a response?

STEVE: You will. In fact I've used it many times, and a lot of times you'll get a call within 24 hours to verify where the graffiti is.

That is fantastic. And there are many other things on the app, too.

STEVE: That's right.

The app is really easy. It's fast, it's quick, it's efficient, and it doesn't have any glitches. It's brilliant.

STEVE: Well, thank you. And in the future, you're actually going to get an e-mail response that lets you know when the graffiti is cleaned up. You'll also be able to log on and see your DWP bill, and you'll see all the incidents that you reported and whether or not they are still outstanding or are closed.

I love it. I did log into DWP because that kind of blew my mind. Sure enough my balance was zero, which was good.

STEVE: The technology LADWP uses is the exact same technology that we're using for 311.

NETWORK OPERATIONS CENTER

Steve Reneker stands in the network operations centers, which houses systems that manage the security and reliability of the networks in the departments controlled by the City Council.

Awesome. From a citizen who lives in the City, that is phenomenal. That is awesome. You're building data bridges to other departments.

STEVE: Absolutely. We have at least five core stakeholder departments that are part of it. In fact, the Bureau of Sanitation is actually hosting the application because they also have a call center that handles all the bulky item pickups. We'll take the incoming call but it'll automatically create and open the work order for, say, a bulky item or a burned out streetlight. It will integrate with a lot of different work order systems.

Fiber and Wi-Fi

Cool. We got ahead of ourselves a little bit because it's exciting. But let's go back and talk a bit more broadly about the initiatives and the strategic plan for the next couple of years, that you want to accomplish.

STEVE: Well, we have a lot of operational issues because we have a lot of technology that's just old. Over the course of this economic downturn, we haven't had the luxury of replac-

ing a lot of equipment that normally would be replaced at end of life. So we have had outages that in my mind are unacceptable, and so we're working to try to identify creative solutions that prevent that from occurring by migrating to new solutions a little sooner than waiting till it dies.

But a lot of the things that are exciting for us are being driven through our elected officials. For example, we're doing an LA community broadband initiative. We're calling it LACBN, which is LA Community Broadband Network, which includes some phenomenal ideas from Mayor Eric Garcetti. He's really a technology-driven mayor who wants to attract and retain the best high-tech companies here locally, and he knows the only way to do that is to be a fiber-rich City. We have a strategy to run fiber to every residence, business, nonprofit, government, and educational institution in Los Angeles, and it would be an open network. That means the City will guide but won't own the network. It's not going to cost the City anything, but you'll get a provider to build that out. It'll be a big company because it'll be probably a $5 billion build, but the openness of the network will require it to establish wholesale rates: The companies that are already here that have spent millions or billions of dollars in infrastructure in Los Angeles will be able to leverage that infrastructure to provide their services as well.

So that's a pretty exciting effort. Now we have Councilman Bob Blumenfield saying, "Hey, but don't forget about Wi-Fi," because it's one thing to have it inside your business and your residence, but what about outdoors? We have a lot of Angelenos with mobile devices, we've got students getting iPads at the LAUSD, visitors coming into the LA area who want to have a rich experience from a broadband perspective as well. So while we're building out this fiber network, we intend to require the individual company that wins this RFP to install wireless access devices every 500 feet on City-owned assets (such as streetlamps) to provide a ubiquitous wireless coverage across all the developed areas within the City of Los Angeles.

We blended those two requirements into what we're calling the LACBN, and we are going to City Council Feb. 14, bringing outside counsel, to help negotiate what will be a very complicated contract with whoever ends up winning this RFP.
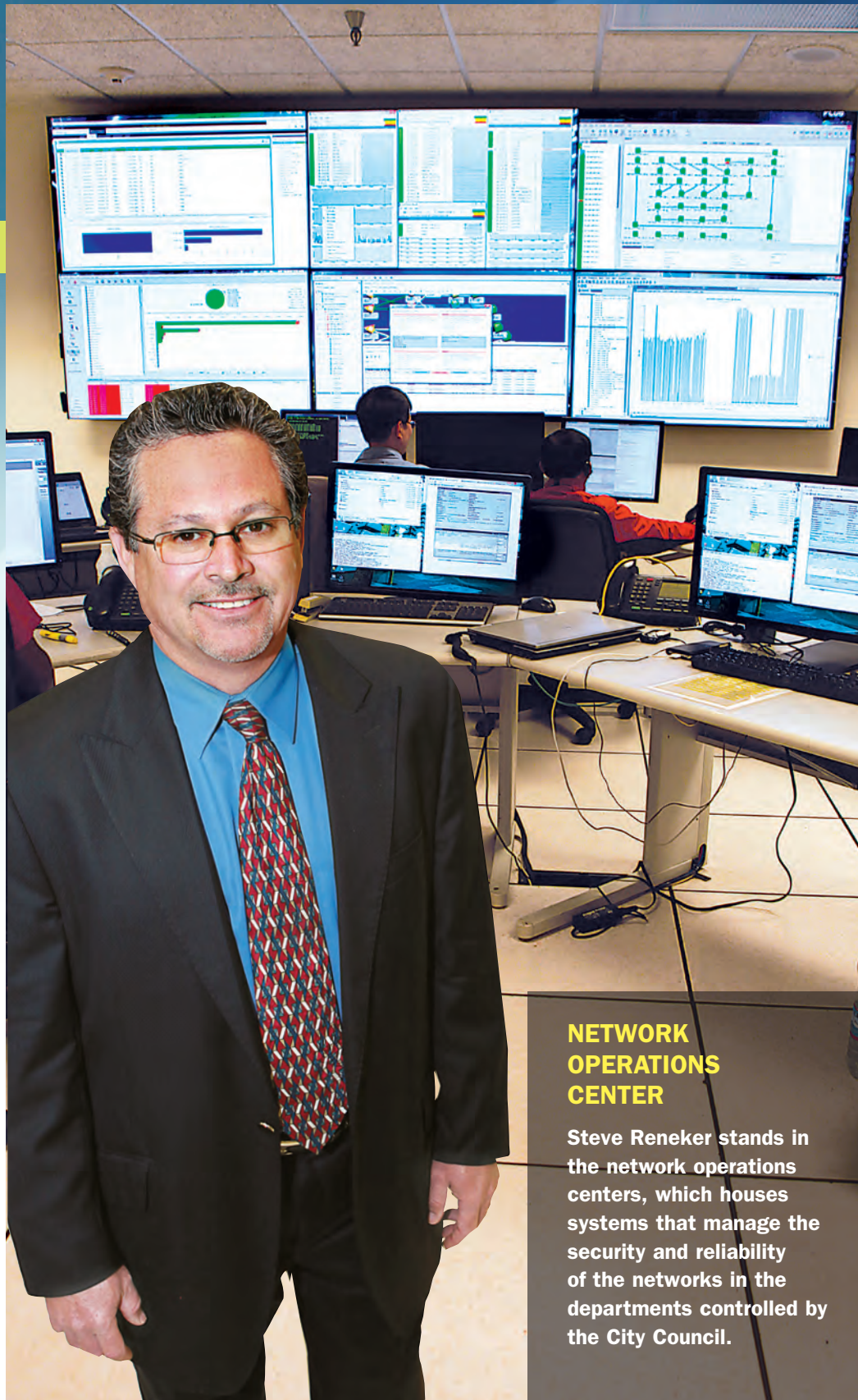
Club CEO John Hawkins (left) and *Alive!* editor John Burnes (right) interview ITA General Manager Steve Reneker in ITA's executive conference room.

Tech on the RISE

I think the blend of both is right for LA as long as you can respect that we're trying to not compete with the incumbent carriers. We intend for there to be a free component, but we don't want to provide a free component that competes with those already in place. It's going to be a careful balance. It's an exciting effort.

Do you have a timeframe on this?
STEVE: I wish I had a firm time on it. There's a lot to do. My hope would be that the RFP would be released within the next few months and that by summertime we would start some level of contract negotiation, and towards the end of this year we would contract. By the first part of 2015, we'd be looking at construction with the City from right-of-way access and fiber construction, and we're trying to gear up to make sure that we have dedicated resources in the City to smoothen out that permitting and inspection process. All that's coming into play; it's going to be a complex project.

VoIP

What about VoIP – internet-based phones?
STEVE: Right now we don't have a lot of Voice Over IP in LA. The second largest expense that we have in the ITA is with our phone technology, and a lot of that is because we're still using Centrex technology for more than 10,000 lines. When I was here back in the mid-1980s, the same technology for phones we used then is the same technology we're using today.

And it's expensive, isn't it?
STEVE: It's ridiculously expensive. There is some Voice Over IP. We've done our Public Works building, we've done our LAPD building because they moved into a new facility, but there hasn't been a consistent approach. We're having a heck of a time managing and maintaining those environments. But to the rest of the departments out there that are still on Centrex, we don't have fiber to it so we're running a data circuit and we're running a legacy voice circuit to it. We could converge all that and save a huge amount of money in our telecommunication expenses by running fiber. So our first strategy is get fiber there. Once you have the fiber there, we can go to VoIP. Or, because we have a lot of young workforce folks coming in and everybody's used to a mobile device, you can have your mobile device – if it's City-issued – be your City device. We have to change some policies and procedures. We can also leverage our PCs to actually be soft phones.

So fiber to every City building is …
STEVE: … the foundation for what everything else will be built on.

Does VoIP come before the LACBN initiative?
STEVE: It will be part of it.

The Cloud

You also mentioned the Cloud. What are the advantages of going to the Cloud rather than maintain your own server farm? Is disaster preparedness a big reason?
STEVE: The Cloud is nothing but an external shared data center somewhere in the United States; it doesn't matter where it is. But the bottom line there: It's backed up. As we

Recreating the City's official Website, www.lacity.org, shown at left, was one of the first priorities of General Manager Steve Reneker.

City of Los Angeles App:
MyLA311
The City's new iPhone and Android app, MyLA311 (displayed by Club CEO John Hawkins, left, and ITA General Manager Steve Reneker), allows the user to pay their DWP bill; report graffiti, potholes and street lighting problems; and many other functions.

'Anytime we come across a piece that's broken, we don't Band-Aid it, we replace it.'

refresh our technology, we need to evaluate the cost of buying new versus provisioning it up at another data center. We can share those resources with others and to get that cost down.

We're always going to have a data center in the City, so it's not like we're going to put everything in the Cloud. There are some things from a security perspective or due to the complexity of what it serves that need to be here. But with that being said, we have more than 20 data centers in the City today, and that's a very inefficient expense. Could it be consolidated? It could, but the best place to start the consolidation is in the Cloud. We need to collaborate with all of our departments and come up with a robust solution for them to make decisions as they refresh their technology.

How will we look 10 years from now? Probably we'll have fewer data centers; most of it will be in the Cloud and will leverage a built-in disaster recovery platform so if there ever is some catastrophic event that hits LA and destroys much of our infrastructure here, we can easily provide connectivity to those data centers to restore services because it's in the Cloud, maybe hosted in a data center in some other state.

What percent do you think will go into the Cloud of the data functionality that you have now?
STEVE: If I had to guess, probably about 70 percent.

The Mayor

We usually don't talk about politics, but does the mayor make a difference in the ability to move fast, to move at all?
STEVE: Absolutely. He has brought on a chief information technology officer who is collaborating with firms, the private sector, incubators and venture capital, and that depends on getting high-speed broadband out to these centers so that people will want to develop here and create here. We're the media mecca of the United States, and so you would expect that a lot of the technology talent will be drawn here, especially if you have gigabit speeds in broadband; then entertainment companies will flock here.

The mayor's family are fourth-generation Angelenos, and he wants to put LA on the map and get it to where it needs to be; he's got big vision, and it's the general managers who work for him who are going to make it happen.

Improving Morale

There's a sense that the morale was low at ITA prior to your arrival. How are you changing that, and why is it important?
STEVE: Morale has been low because of the economic impacts on the City, and every department has been impacted. We're all doing more with less, and you've got to ask yourselves how long will it be before things just break. The leadership understands where they're coming from and that it's our responsibility to work with them and try to figure out how we can change that. In my particular case, anytime that we come across a technology piece that breaks or is broken, we don't Band-Aid it, we replace it. It's our responsibility to make sure that we just don't keep fixing the problems that already exist when we know they're just going to reoccur.

Right.
STEVE: We created what we call a service level task force. Anytime we have an outage, we work with staff. We don't reprimand them over it, we basically let them know, hey, we're in this with you and we need to figure out a solution. How do we prevent this from reoccurring? It all comes down to working together and coming up with solutions and use state of the art technology available today, which in most cases is a lot less expensive than it was when they initially implemented it. I think they recognize that. I think they are excited that change is coming – maybe not as fast as they would like, ITA now has a strategic plan out there, which we haven't had for many, many years.

Online Government

Government's going online everywhere, at least in this country. You're leveraging the Web to do things that might've been done in far slower and more costly ways more efficiently.
STEVE: That's exactly right, and so when you take a look at the redesign of LAcity.org, the focus really is leveraging what we've learned over the last 10 years. We capture statistics and we know where people are going on our Website. It was taking people eight and nine clicks to get to the most popular sites; why shouldn't it only be one to two clicks away? The whole redesign was focused around those things that are most important to the citizens.

And a lot of the cool features that we've added in there – getting access to live audio and live video feeds of council meetings and things like that – provide a lot of enhanced capabilities that weren't there in the past.

What about voting online?
STEVE: Voting in the City, even though it's done by the City Clerk, is mandated by the State of California, the Secretary of the State. They determine how voting is done and whether

New 311 Director Donna Arrechea leads a tour of the 311 call center with ITA General Manager Steve Reneker and Club CEO John Hawkins. In the bottom photo, Donna explains the data on the monitor – the live call volume and other statistics.

electronic voting machines can be used. I think it would be great if we could vote online for our elected officials. I think you'd see turnout numbers increase significantly. But there's a lot of concern by groups out there that the security aspects of voting online just aren't quite there yet. I tend to disagree with that. You know, certainly if you can pay your taxes online, you can do your banking online, we should be able to learn how to vote online securely. But that's where things are, and I hope that will change in the future.

A broader question: As the government becomes increasingly online, it costs money to bring it into your home. Channel 35 costs me money because I have to pay my cable company to be able to watch it. Is there a way to get government without it costing money? Right now I can walk up to the counter in Finance and pay my taxes, but to pay them online, I've got to pay my internet provider. Is the future going to mean I have to pay to get the government into my house?

STEVE: I would hope not. This is where the LACBN will really come in. If we can provide a distribution mechanism to every household regardless of income level and you can get some level of free, and if that free is good enough to be able to stream Channel 35 stream from LACity.org down there, I think we've bridged that divide. But, I think it remains to be seen on how this contract is negotiated and what those streaming speeds or whether streaming will even be allowed for those low-income people for free, whether there will be maybe some lower cost paid offerings that will allow that streaming to take place.

And, I suppose I can get Wi-Fi through the library and it doesn't cost anything.

STEVE: That's correct.

You can always access your government through the library.

STEVE: And through most community centers and senior centers as well.

Channel 35

Speaking of Channel 35, it's transitioning and moving down to Olvera Street.

STEVE: It is. We were leveraging the old Merced Theater that's down there. We're looking at actually restoring the theater and also provisioning it so that there's some public access component to it, maybe a Black Box Theater or maybe a live audience type of viewing, and leveraging Channel 35 to be part of that. The rest would be the studios, which right now we're spending some very expensive dollars on a leased facility where they're located, and they're fragmented in a couple of different locations.

We've very excited about that. Channel 35 is the voice of LA to the people. It's a way to find out what's going on in City Hall, and find out about our history. What's really exciting about what we're doing with Channel 35 isn't just moving them, but we're going to go from analog technology to solid-state technology. And that means we'll be able to support high-definition TV. We're also leveraging a lot more sophisticated technology from an ADA perspective. Everything we're starting to do now going forward is going to have closed-captioning. We're looking at a YouTube presence where all the content that we create will be up on a Channel 35 YouTube channel.

What about content?

STEVE: Again, we've been impacted by the downturn. We used to create a lot of our own content, but the staffing today isn't really able to do that. So we're the content distributors more than creators. We will still have a studio and we'll definitely offer our resources to be able to do some type of reoccurring types of programming, but for most of the creative pieces, we'll have to contract that out.

Is the future of Channel 35 going to be online, or will it still be part of a mandate to cable systems in the City of LA to deliver that to the City?

STEVE: It will be over all media.

Cable and tablets.

STEVE: Right. It's on the Web today, so on your tablet or your mobile device you can go to out today and watch the council meetings or anything that's broadcast live over Channel 35.

The End of Windows XP

I have to talk to you about Windows XP. I just saw recently in *USA Today* that finally Microsoft is no longer going to support it. Drawing it down is part of your strategic plan.

STEVE: Mayor Garcetti's Executive Directive 2 was all around cyber security. We actually have a cyber intrusion command center that is there to be an entity for all the departments to report any cyber-related incidents that occur. In collaboration with the Mayor's Office, the LAPD, the Secret Service and the FBI, we all share intelligence and information and are able to harden our infrastructure, but you only can do that based on your weakest link. Our weakest link is Windows XP. Microsoft will no longer publish patches after April 8, and so we've made that a priority to make sure that everything has been upgraded to at least Windows 7. It doesn't get us up to today's standard, but at least we get to something that runs all of our applications that people need access to. The LAPD is probably the biggest one with I think about 4,500 PCs left to go, and here we are with seven weeks to go before that deadline. They're going to make it.

We're very diligent. We do weekly reporting on it right now. We've got huge teams of both contract workers, interns and City staff doing those remediation efforts right now. The complicated piece is that we have maybe 100 or 200 PCs with applications that won't support anything else other than XP. I think we've got a strategy well in hand to address that.

Open Data

What is open data?

STEVE: That's Executive Directive 3 from Mayor Garcetti. It's leveraging all of the data that we have in all of our departments. We as a City have not done a good job sharing data across departments, yet alone with the public. There's a huge effort led by Ron Galperin, our Controller. He lifted up Control Panel LA in just about four to six weeks. Now there's transparency with all of our financial and payroll data. We're going to put everything that's nonfinancial/non-payroll on an open data Website. The mayor's office already has the product in place. You'll see that being announced next month. We have a very, very diligent effort being done by all the departments to populate datasets that are up there so that the public will have access to information that they've never had before, we hope reducing all of our public records requests. We want to

learn from that. We want to try to find apps that maybe we can incorporate, or maybe entrepreneurs out there in the City can develop, that will enable a more efficient government.

That data sharing is one of the reasons that the 311 app is great.

STEVE: That's exactly right.

When you sleep? How do you keep a city this size moving forward with technology moving as fast as it does?

STEVE: We try to prioritize what we can do; you can do only so much with the resources you have. You can't do it all. You've got to be realistic about it. We prioritize projects based on funding, staffing constraints, and what is most important to the City. That strategy enables everybody to keep going and enables us to get sleep at night. And to make sure we're all working as a team.

Thanks for your time.

STEVE: You're welcome. ∎

From left: Club CEO John Hawkins and ITA General Manager Steve Reneker tour the ITA's network operations center (NOC). Many of the NOC's functions will be moving into the cloud.