Subject: FW: SB 649 - Item #8
Attachments: VZ SB649 Supporters.pdf; VZ_El_Segundo_Letter[1].pdf; VZ_LACOUNTY_Economic_Growth.pdf; VZ_SoCal_911_b.pdf; VZ_SB649_Fact_Sheet.pdf; VZ_5G_Background.pdf

From: Gloria Leon [mailto:gloria@ek-sunkin.com]
Sent: Tuesday, May 16, 2017 12:40 PM
To: Fuentes, Suzanne (Mayor); Drew Boyles (Mayor Pro Tem); Don Brann (Council Member); Carol Pirsztuk (Council Member); Dugan, Mike
Cc: Carpenter, Greg; Weaver, Tracy (City Clerk)
Subject: SB 649 - Item #8

On behalf of our client, Verizon, attached please find information regarding SB 649 as well as a letter to respectfully ask that the City Council take a neutral position on SB649. We would appreciate the opportunity to discuss this matter with the City Council and would appreciate your review of the attached materials prior to taking a position.

Attachments:

- Background paper on 5G technology
- SB 649 Fact sheet
- Emergency Services document
- LA County "GDP" Growth projections
- List of Supporters of SB649

Thank you,

Gloria

Gloria Leon
Ek, Sunkin, Klink & Bai
Senate Bill 649 – Supporters

Public Safety Organizations
California Peace Officers’ Association
California Probation, Parole and Correctional Association
California State Sheriffs’ Association
California Utilities Emergency Association
Lake County Sheriff Brian L. Martin
Peace Officers Research Association of California

Business Organizations
Berkeley Chamber of Commerce
Carlsbad Chamber of Commerce
Carmel Valley Chamber of Commerce
Ceritos Regional Chamber of Commerce
CMTA
Downtown San Diego Partnership
El Dorado Chamber of Commerce
Gateway Chamber Alliance
Greater Coachella Valley Chamber
Jobs and Housing Coalition
Long Beach Area Chamber of Commerce
Mohave Development
Monterey Business Council
Oakland Chamber of Commerce
Oceanside Chamber of Commerce
Orange County Business Council
Pacific Grove Chamber of Commerce
Sacramento Metro Chamber
San Diego North Economic Development Council
San Diego Regional Economic Development Council
San Ysidro Chamber of Commerce
Silicon Valley Leadership Group
South Bay Association of Chambers Association
Torrance Chamber of Commerce

Ethnic Organizations (cont’d)
NLBWA of Los Angeles
North County Hispanic Chamber of Commerce
Orange County Hispanic Chamber of Commerce
Organization of Chinese Americans
Sablo
Sacramento Asian Chamber of Commerce
Sacramento Hispanic Chamber
Southern California Hispanic Chamber of Commerce
TELACU Educational Foundation
Valle Latino Environmental Advancement Project
Women’s Intercultural Network
The ARC of California

Education / Faith / Families / Seniors / Veterans
California Congress of Seniors
Concerned Citizens Community Involvement
Disability Rights Education & Defense Fund
Elderly Foundation
Eskaton Foundation
Exceptional Parents Unlimited
Fundacion Pro Joven
Friday Night Live
Invictus Foundation
Lifestyle Stroke Foundation
Lighthouse Counseling
Meeting of the Minds
National City Public Safety Foundation
Sacramento Regional Conservation Corps
Society for the Blind
Solano Community College Education Foundation
Southern Christian Leadership Council
United Policyholders
Urban Corps of San Diego County
Volunteers of America Southwest

Telecommunication / Technology Companies
Verizon
AT&T
T-Mobile
Sprint
Google
Qualcomm
CTIA
Cal Innovates
Hacker Lab
TechNet
59 Days of Code
I/O Labs
The Urban Hive

Ethnic Organizations
American Indian Chamber of Commerce
APAPA – So. Cal. Region
Asian Resources Inc.
California Asian Chamber of Commerce
California Hispanic Chambers of Commerce
California NAACP
California Urban Partnership
CAPITAL of Sacramento
Chinese-American Association of Solano County
Community Technology Network
Greater Los Angeles African American Chamber Fresno
Area Hispanic Foundation
Hispanic Heritage Foundation
InBiz Latino
Inglewood/South Bay Branch – NAACP
Latin Business Association
Latino Council
Los Angeles Urban League
NAACP North San Diego Chapter
NAHREP Sacramento
A partner you can rely on in a crisis.

The demand for advanced wireless connectivity and capacity continues to increase exponentially every year. Almost 92% of Californians use or own a cellphone or smartphone, and more than 18 million residents use their mobile device to access the Internet.

The impact of this rapid rise in mobile subscribers has put existing wireless infrastructure under strain, especially during peak periods. As a result, wireless providers must constantly invest in building, upgrading and expanding the speed and capacity of their networks, using the newest equipment and technologies, to keep pace with today’s needs and lay the groundwork for further growth.

This ongoing investment in California’s wireless infrastructure comes at no cost to taxpayers but plays a critical role in helping to advance health care and ensure public safety, especially for California’s most vulnerable populations.

Most people will only make one 9-1-1 call in their lifetime, but it will be the most important call to local government that residents ever make.

The Federal Communications Commission finds, “For many Americans, the ability to call 9-1-1 for help in an emergency is one of the main reasons they own a wireless phone.”

In California, 26,712,201 calls to 9-1-1 were made – the most for any state in the nation. Of these, nearly 80%, or 21,249,991 calls were made from cellular devices.

Statewide 5G deployment will have a significant impact on public safety and emergency services, including Next Generation 9-1-1, text to 9-1-1, predictive analysis, early earthquake warning systems and may help cut response times of emergency services. Even a 60-second improvement in first responder response time translates to a reduction of 8% in mortality.

5G will also enable first responders and emergency room doctors to receive and send live, real-time video and sensor data from an emergency scene, along with patient vitals and medical records – all before the patient arrives at the hospital.
What Public Safety Organizations Are Saying About SB 649:

Disasters, both man-made and natural, provide ample evidence of the critical need for a robust wireless infrastructure for public safety.

The need for a reliable, high-speed wireless infrastructure throughout California is vital so law enforcement can better protect and save lives.

The California State Sheriffs’ Association is pleased to support SB 649.

Usha Mutshier
Legislative Representative

On behalf of the California Peace Officers’ Association (CPOA), representing more than 20,000 public safety members, we are pleased to support... SB 649... which would facilitate the rapid development of critical wireless infrastructure that uses the latest and most cost-effective cellular technologies for [the] advancement of public safety.

Assistant Chief Marc Coopwood
President, California Peace Officers’ Association
Beverly Hills Police Department

SB 649... sets forth local processes to help foster faster and reliable cellular infrastructure to assist in emergency response, access to emergency services, and assist public safety individuals in their work in the community.

Michele Kennedy
President, California Probation, Parole and Correctional Association

The Peace Officers Research Association of California (PORAC), representing 69,000 public safety members and 920 public safety associations... is pleased to support SB 649 and we look forward to its successful passage.

Aaron Read
Legislative Advocate
In just the past few years, mayors and other officials in cities across the country have begun to draw on the reams of data at their disposal—about income, burglaries, traffic, fires, illnesses, parking citations and more—to tackle many of the problems of urban life. Whether it’s making it easier for residents to find parking places, or guiding health inspectors to high-risk restaurants or giving smoke alarms to the households that are most likely to suffer fatal fires, big-data technologies are beginning to transform the way cities work.

With census and other data, New Orleans mapped the combined risk of missing smoke alarms and fire deaths, helping officials target distribution of smoke detectors.

A few months after the program began, firefighters responded to a call in Central New Orleans. Arriving, the fire crew found 3 families - 11 people in all - huddled on the lawn. The residents had been alerted by smoke detectors recently installed under the outreach program.

"That was just one of those stories where you go, 'This works,"' Chief [Tim] McConnell says. "For us, it’s a game changer."

Predictive analytics have also been used to improve restaurant health inspections in Chicago. The Department of Public Health... needed a better way to prioritize inspections to make sure places with potential critical violations - those that carry the greatest risk for the spread of food-borne illness - were examined before someone actually became sick.

The data team in the city’s Department of Innovation and Technology developed an algorithm that looked at 11 variables... a follow-up analysis found that inspectors were visiting restaurants with possible critical violations seven days sooner than before.

Sensor-equipped asthma inhalers in Louisville, Ky., that collect data on time and place of use have improved care for individuals and helped the city address problem areas.

In one case, sensor data spotlighted a congested road... where inhaler use was three times as high as in other parts of the city. In response, the city planted a belt of trees separating the road from a nearby residential neighborhood; the plantings have resulted in a 60% reduction in particulate matter (which can aggravate breathing problems) behind the green belt.
May 16, 2017

Mayor Suzanne Fuentes
City of El Segundo
350 Main Street
El Segundo, California 90245

RE: Senate Bill 649

Dear Mayor Fuentes,

It has come to our attention that City Manager Greg Carpenter has advised the El Segundo City Council to take a formal position opposing Senate Bill 649 (Hueso) relating to the local permitting process for small wireless facility installation ("small cells") in California. We respectfully ask that you reconsider this request at least until you and the City Council have an opportunity to review the attached materials and consider our invitation to discuss your concerns directly with us. This issue is simply too important not to get right.

For several months, Verizon has led a campaign to reach out directly to local government leaders throughout the state to discuss the critical need to modernize the process for wireless infrastructure deployment. We have found many city leaders intrinsically recognize this need and some have taken proactive action to update their own city’s processes to keep pace with technology advancements. The policy and technical briefings we have had and continue to have with local leaders has helped inform the legislative process so that together we can expand local best practices to the state level and communities across California benefit.

During this same time, Verizon representatives have traveled across the state to meet with any stakeholder willing to discuss this legislation in good faith. As a direct result of these discussions, we’ve made several amendments to this legislation and secured the support of over 100 businesses, community and public safety groups throughout the state.

The attached materials include a complete list of supporters for SB 649, a background paper on 5G technology, a fact sheet on SB 649, a case study on Verizon’s strong commitment to public safety, an Accenture study of economic and job growth projections for Los Angeles County and a memo from a nationally-recognized public opinion research firm.

Voters, taxpayers and residents agree this legislation strikes an appropriate balance between wireless providers and local governments and encourages ongoing investment in California’s wireless infrastructure while protecting municipal interests. Most importantly, Californians view this legislation as serving a compelling public interest as they increasingly use wireless services to talk, text, access the Internet and connect with public safety services.
Wireless infrastructure providers are ready to invest in and expand California's network through small cell deployment. Small cells, and 5G technology, hold tremendous promise to help communities improve civic services, public safety, public transportation, health care, education, energy grids and the convenience of residents.

We respectfully ask that you consider all viewpoints in order to make a more informed decision.

Sincerely,

Jesús G. Román
Vice President of Government Affairs
Public Policy & Legal Affairs

cc: Mayor Pro Tem Drew Boyles
Councilmember Don Brann
Councilmember Carol Pirsztuk
Councilmember Michael Dugan
Greg Carpenter, City Manager
Ken Berkman, Interim Director of Public Works
SB 649 would modernize the local permitting process for small wireless facility installation ("small cells") in California.

It would make small cells a "permitted use" statewide for zoning purposes while empowering local governments to adopt and enforce their own local health, safety and design standards for small cell deployment within a workable, efficient and streamlined framework.

Why SB 649 is needed

The demand for advanced wireless connectivity and capacity is soaring. Consumers today typically carry multiple broadband connected devices on them at all times, and the amount of data consumers are using over each of these devices is increasing exponentially. In the US, according to Cisco, mobile data traffic will reach 6.1 Exabytes per month by 2021 (the equivalent of 1,514 million DVDs each month). To meet this demand, providers must fortify (or "densify") their existing networks with small wireless facilities known as "small cells." Small cells add data capacity to existing 4G LTE networks and are essential to deploying the next generation of wireless broadband technology, 5G.

5G will help communities improve infrastructure, public transportation, public safety, air quality, health care, education, energy grids and overall convenience for their citizens.

What are Small Cells?

Small cells are vital components of wireless broadband infrastructure that fortify existing 4G LTE networks and will power 5G. They are far less obtrusive than traditional, 150-foot cell towers. Small cells are placed on existing light poles, utility poles and other vertical structures. They consist of two main components: small antennas placed at or near the top of the pole or structure that are cumulatively no more than six cubic feet in volume and ancillary equipment such as remote radio heads and cabinets placed tower on or near the existing structure that cumulatively may not exceed 28 cubic feet. Importantly, these volume limitations are cumulative, meaning the individual components are placed on or near the structure in compliance with all local health, safety and design standards.
The Problem: Small cells are being treated the same as a 150-foot macro tower

Access/Cost

Many localities simply refuse to allow providers to attach small wireless facilities to locally-owned utility poles, street lights and other vertical structures in the public right of way or they slow roll deployment by demanding extremely high attachment fees that far exceed what they charge other utilities for pole attachments. These outright denials of access and exorbitant fees totally block deployment in some cities, and the negotiating power of larger cities impedes the deployment of advanced wireless communications infrastructure in other communities across California.

The fee to attach a small cell to a streetlight shouldn’t be the same as that charged to erect a new, large macro tower. Instead, localities should grant all communications providers nondiscriminatory, nonexclusive access to street lights, utility poles and other vertical infrastructure in the public right of way for small cell attachment at fair, reasonable and nondiscriminatory prices and in compliance with all health, safety and design standards applicable to utility distribution facilities in the public right of way.

Process

In almost all localities, wireless providers cannot deploy a single small cell on any existing structure, even utility poles in the right of way, without first getting a “conditional use permit” from the local zoning board, a cumbersome process that requires individual public hearings that are often exploited by small groups of development opponents to block or delay critical broadband infrastructure deployment in our communities. But while it may have made sense to require special zoning approval to erect a new, 150-foot macro tower on a hill in front of the Hollywood sign, it makes no sense to apply this same requirement for small cells that are far less obtrusive than cell towers and are placed on existing poles and other structures already being utilized to provide utility services.

California needs the most advanced wireless infrastructure to keep up with consumer demand and to prepare for 5G. The current process would make it impossible to fully deploy the 5G network. Instead, California should adopt a new regulatory framework for small wireless facilities deployment that modernizes the zoning process and empowers local governments to adopt and enforce their own local health, and safety and design standards for small cell deployment in a way that works better and more efficiently for all parties.
SB 649 Framework

**Costs:** Fees charged by localities to attach small wireless facilities to locally-owned vertical infrastructure in the public right of way should be fair, reasonable and ensure the locality receives full recovery of all costs of attachment, consistent with the standard the Legislature previously adopted for municipally owned utility infrastructure. Wireless permits fees should also be fair, reasonable and cost-based.

**Access:** All communications providers should have fair, reasonable and nondiscriminatory access to attach small wireless facilities to locally-owned utility poles, street lights and other vertical infrastructure suitable for utility attachment in the public rights-of-way.

**Process:** Small wireless facilities attachment should be a "permitted use" statewide subject to issuance of a ministerial wireless attachment or encroachment permit and in compliance with all applicable health and safety codes, building codes and reasonable design standards. Permits should be processed within applicable federal time deadlines consistent with existing state and federal law.

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SB 649 Modernizes Local Control

SB 649 would make small wireless facilities installation a "permitted use" for zoning purposes while establishing a new permitting framework for small wireless facilities that empowers local governments to adopt and enforce their own building, health and safety codes and reasonable design standards. Wireless providers would still be required to obtain permits, but they would be approved or denied in a programmatic, ministerial type-fashion focused on compliance with local codes. The municipality has the right to deny an application that does not meet objective requirements. This is the right balance to ensure that wireless networks can meet consumer needs while caring for vital municipal interests.
5G: Fueling economic growth and job opportunities in the County of Los Angeles.

Wireless infrastructure providers are ready to invest in and expand California's wireless networks. Verizon has invested over $40 billion nationally over the last four years to expand and fortify the nation's best and most reliable network, and we expect to scale up our already-significant investment as we deploy 5G and build Smart Communities across California.

Here are projections* of total industry network investment, GDP growth and job creation in the County of Los Angeles through 5G and Senate Bill 649:

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<tr>
<th>State</th>
<th>California</th>
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<tr>
<td>County</td>
<td>Los Angeles</td>
</tr>
<tr>
<td>Population</td>
<td>10,170,292</td>
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<td>Estimated Network Investment - Total ($M)</td>
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</tbody>
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* Study conducted by Accenture/CTIA, January 2017
5G: The Advanced Wireless Technology California Needs to Relieve Data Congestion and Build the Network of the Future

The demand for advanced wireless connectivity and capacity continues to increase exponentially every year. In 2014, mobile data traffic was nearly 30 times the size of the entire global Internet in 2000. Last year, wireless networks carried more than 100,000 times the traffic than in 2008. Almost 92% of Californians use or own a cellphone or smartphone, and more than 18 million residents use their mobile device to access the Internet.

This unprecedented explosion in mobile data traffic fuels global economic growth and productivity and drives new innovations in smartphone applications, telemedicine, immersive distance learning, traffic management and other smart community solutions, the Internet of Things and virtual reality. And at the center of this global technological revolution lies California.

But often lost in the excitement are the practical challenges providers face in supporting this mobile data tsunami. Wireless infrastructure and networks must be engineered and built to handle growing and fluctuating traffic generated by users, time-of-day usage variations, geographic and topographical coverage challenges, and ever increasing user density and migration. As a result, providers must constantly invest in building, upgrading and expanding the speed and capacity of their networks, using the newest equipment and technologies, to keep pace with today’s needs and lay the groundwork for further growth.

Wireless infrastructure providers are ready to deploy 5G. But permitting processes must be modernized. Outdated local permitting regulations work to block or slow building wireless facilities and investing in and expanding the network, exacerbating today’s growing wireless data congestion and impeding future network transformations, slowing the global engine of growth and innovation.

5G networks are the next generation of advanced wireless connectivity able to handle 1,000 times the current traffic volume at exponentially faster speeds. The deployment of 5G is essential to ensure California consumers, businesses and communities continue to enjoy the near-limitless benefits of the world’s most advanced wireless networks.
How 5G Networks Operate:

5G utilizes millimeter-wave, high-band radio-frequency spectrum which requires a network of "small cells" to transmit the signal to end users. In addition, "small cells" boost the capacity of existing 4G LTE networks to handle growing pressure on network congestion in dense, high-demand areas.

"Small cells" are strategically placed on utility poles, streetlights and structures in the public right of way. They are linked by fiber to boost capacity, speed and coverage in high demand areas. "Small cells" are a fraction of the size of traditional cell towers and are designed to blend into the environment.

5G Technology Will:

Provide structural relief for the dramatic growth in mobile data traffic

- "Small cells" fortify existing 4G LTE networks by taking the pressure off macro towers during periods of high congestion.

Provide Up to 10x Faster Transmission Speeds

- 5G networks can achieve peak download speeds of 10 gigabit per second (gps) – twenty times the 40-50 mbps of today’s 4G networks.

Accelerate “load times”

- 5G will reduce the “latency” (the delay in sending data to another device) to about one millisecond (ms) from today’s 50 ms via 4G. This will be essential for new technologies like autonomous vehicles and remote surgery.

Open the pathway to a more “connected world”

- 5G offers the capacity and bandwidth to accommodate billions of connected devices – from "wearables" to smart homes to connected cars.

- 5G could help communities across the country reduce energy usage, ease traffic congestion and lower fuel costs.¹

Help save lives through faster communication

- A 60 second improvement in first responder response time translates to a reduction of 8% in mortality.²
5G will empower California to maintain its global competitive advantage:

- California leads the nation with 1.1 million employees in the technology sector.
- Since 2008, with the launch of Apple’s iOS App Store, California employs over 22% of all U.S. "app economy" developers with 375,000 jobs. Our nearest competitor is New York with 9.4%.
- 5G deployment could foster up to 3 million new jobs in construction, network installation, engineering and planning.³
- According to the California Chamber of Commerce, for every job created in the technology sector, approximately 4.3 jobs are created in other sectors throughout the local economy.
- Since 2010, the wireless industry has invested more than $200 billion in infrastructure.

¹ Accenture Study TBD
² Deloitte Study TBD
³ Accenture Study TBD