

**BERKELEY PUBLIC WORKS COMMISSION**  
**2015 WORK PLANNING**

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**Date:** December 13, 2014

**Attendees:** Ray Yep, Larry Henry, Margo Schueler, Andy Kelly, Diz Swift, Stefan Elgstran, Kim Le, Sean Rose

**Mission:**

Advises the Council on maintenance, repair, and capital improvement of streets, sidewalks, sanitary sewers, storm drains, City buildings, communication systems, vehicles and equipment, and undergrounding of utilities.

No.	Subject	Background	Potential Activities	PWC Priority for 2015
1	Measure M implementation	Measure M was passed in Nov. 2012. The PWC took the following actions: <ul style="list-style-type: none"> <li>• Nov. 2013 - Paving plan for FY2014-2018. This was a 2+3 plan.</li> <li>• Jun 2014 – Paving plan for FY2015.</li> <li>• Nov 2014 – Paving plan for FY2016.</li> </ul>	A. Work with staff to develop the rolling 5-year paving plan. The next cycle will be FY2016-2020. The current sub-committee is Ray, Diz, Larry, and Margo. B. Review and recommend revisions to the City’s Street Rehabilitation and Repair Policy. This should consider setting June of each year to prepare the 5 year paving plan, use of the Scorecard, etc. C. Assist City and Skeo Solutions with outreach to the public. This should include annual community meetings and other activities. The current sub-committee is Ray, Diz, and Travis.	A. Target to go to Council in Oct/Nov for the FY17 paving plan recommendations. B. Factor in Measure BB revenue into future plans. C. Hold on reviewing the City’s paving plan policy. D. Plan a community meeting in Feb/Mar with assistance from Skeo Solutions. E. Review if Skeo can conduct public outreach beyond Measure M.
2	Permeable paver demonstration project	The City completed construction a demonstration project on Allston Way in 2014.	A. Provide oversight on the post construction monitoring of the project area. The monitoring should include runoff quantity, runoff water quality, noise, vehicle speed, durability, etc.  Larry has the most background on this.	A. PWC will stay involved to review monitoring data when it is available. Don Irby will report to the PWC.
3	LED street lighting	The City completed project to convert all of Berkeley to LED street lighting in 2014.	A. Provide oversight on energy savings, areas needing lighting changes, etc.	A. PWC will stay involved and would like to review the annual report on the lighting program.

No.	Subject	Background	Potential Activities	PWC Priority for 2015
			The current sub-committee is Andy and Margo.	B. The PWC sub-committee is no longer needed.
4	Public facility naming policy	The PWC has addressed the proposed renaming of Harold Way and of a pedestrian walk. During this process, we became very familiar with the City's policy on renaming public facilities.	A. Review and recommend revisions to the City's public facility renaming policy. The PWC has identified some changes that would be helpful.  Travis was the lead on this.	A. Travis shall prepare the policy recommendations by mid-2015. Plan to go to Council by end of 2015.
5	Residential curbside Electric vehicle charging policy	Council requested the City Manager to work with staff and commissions to develop standards, conditions, and guidelines for a pilot program to allow electric vehicles charging in the public right-of-way.	A. Provide oversight on the pilot program.  Larry was the lead on this.	A. The pilot program is in place. The PWC will stay involved. B. No sub-committee is needed.
6	Electric utility undergrounding	Berkeley has been involved with Rule 20A utility undergrounding since the 1970's. Special districts were formed; however, the funds are very limited. There is currently a moratorium on forming new districts. Councilwoman Wengraf is considering a task force to review the feasibility of preparing an undergrounding master plan for the City.	A. Participate in the task force, if it is formed.  Larry has the most background on this. Ray has met with Wengraf.	A. A referral is coming from Councilwoman Wengraf to the PWC, Transportation and Disaster & Fire Safety. B. There was a December 2008 report to Council on undergrounding. C. A sub-committee is needed.
7	Sanitary sewers	Berkeley has signed a consent decree to improve its sewer system and to reduce peak flows.	A. Provide oversight on the program implementation.	A. Public Works is conducting a sewer rate study. The PWC would like to review the draft recommendations.
8	Public Works funding	Berkeley has extensive public works funding needs, including sewers, buildings, watersheds, streets, undergrounding utilities,	A. Work with Public Works staff on prioritization of the funding needs.	A. PWC will work with staff when the information is available.

No.	Subject	Background	Potential Activities	PWC Priority for 2015
		and other needs.		
9	Local Hazards Mitigation Plan	A draft of Berkeley's 2014 LHMP was released in October and comments were due by Dec. 9. The final draft plan to be presented to Council for adoption in spring 2014.	A. Review subsequent drafts for public works implications and monitor the submittal to Council.  Larry worked on PWC's input.	Sean will check on the status.
10	Sidewalk maintenance	Improperly maintained sidewalks are a legal and financial liability to the City. Having adequate funds and staff resources is a challenge to the City. The current policy was approved with little public input.	A. Review and update the City's sidewalk maintenance policy.  The current sub-committee is Margo, Andy, and Travis.	A. PWC wants to be involved and will propose policy changes to Council in 2015. B. A sub-committee is needed.
11	Emergency preparedness	See article below from SF Chronicle	A. Discuss appropriateness for Berkeley  Larry has interest in this.	A. Invite Berkeley's Resiliency Officer to a future PWC meeting to discuss this topic.
12	City buildings			A. Sean will check with Phil Harrington on the PWC having input to facility improvements. The PWC is interested in the use of solar, water conservations, etc.
13	Watershed Management Plan and storm drains			A. Sean will ask Danny Akagi to attend a PWC meeting to discuss "hot spots" from the large December storm. B. There is currently no "appetite" for a storm drain fee increase.

**Meeting Schedule: At the December 13, 2014 Work Planning Meeting for 2015, the PWC discussed the meeting schedule for 2015. The meeting schedule is attached. Rose will request an additional meeting for the PWC to conduct the 2016 Work Planning Meeting in December 2015. The meeting will tentatively be held at 6pm on December 10, 2014.**

**San Francisco Chronicle**

November 30, 2014

KASHIWA-NO-HA, Japan — A new suburb northeast of Tokyo can supply its 5,000 residents with electricity for three days the next time an earthquake blacks out the national grid.

And in a country still recovering from a 2011 earthquake and tsunami that killed 15,889 people, the suburb's builders know it's simply a question of when — not whether — catastrophe will strike again.

The quake and tsunami, which crippled the Fukushima Dai-ichi nuclear plant and sent blackouts rolling across Japan, has forced the country to rethink disaster planning and look for new ways to keep the lights on.

One solution may lie in “microgrids,” small electrical grids that can keep running on their own if the national grid fails. In the United States, interest in microgrids has been surging since Hurricane Sandy in 2012 blacked out lower Manhattan for days. And in an earthquake-prone region like the Bay Area, the benefits of such a system could be enormous.

**'Turning point'**

“The earthquake was the big turning point,” said Atsuji Morita, a project manager with Toyota Motor Corp.'s business planning division. “It changed our minds to create a new system to ensure the security of this industrial area.”

Toyota refers to that system as the “F-Grid.”

The company's new auto plant, next to the village of Ohira in Japan's Miyagi prefecture, has its own power generating station, fueled by natural gas. The 7.8 megawatt plant also supplies electricity to a cluster of smaller factories and facilities next door.

One makes glass for car windows, another, tires. A third grows green peppers — roughly 5 percent of Japan's domestic supply — using waste heat from the power plant to keep the peppers warm. The greenhouse lies just a few hundred yards from the Toyota factory, where 1,500 workers build Corollas and Aquas.

The entire industrial park, about 85 miles northwest of the Fukushima nuclear plant, is tied in to the national power grid. But in emergencies, it can function on its own, as well as feed power to Ohira's town hall and emergency shelters. In case the F-Grid's power plant has to shut down, banks of used Prius batteries will supply enough juice to run phones and computers.

The plant even sells excess electricity to the local utility at times, although that was never the point.

“It’s not our object to sell electricity — only the surplus,” Morita said. “When we have a disaster, like an earthquake, we’ll need the electricity.”

Planning for Kashiwa-no-ha Smart City, 30 miles northeast of Tokyo, began years before the 2011 earthquake. But the newly built suburb has become a model illustrating how to plan for emergencies.

It too has its own natural gas power plant that can feed apartments, offices and shops. It also has rooftop solar panels, the largest installation of lithium-ion batteries in Japan and will soon add another massive battery pack using a different chemistry, sodium-sulfur.

Unlike Toyota’s new factory, Kashiwa-no-ha gets the vast majority of its power from the national grid on most days — at least 90 percent. But should the grid fail, like the rolling blackouts that swept much of Japan after the Fukushima plant melted down, the community can generate its own electricity for three days, provided its residents cut individual energy use by 40 percent.

Kashiwa-no-ha even keeps a supply of oil on hand to run a backup power generator, after its builders concluded that oil was easier to store on site than large quantities of natural gas. The community maintains three-day emergency supplies of water and food rations.

### **Convenient and efficient**

Those emergency features probably aren’t the suburb’s main draw. The Smart City has its own commuter rail station with a 30-minute express train to downtown Tokyo. The community boasts its own hospital and mall — complete with Old Navy, Zara and Tully’s Coffee — all tightly packed together for easy walking. And its apartments were built with energy-efficient lights and appliances to keep monthly bills low and reduce greenhouse gas emissions.

“It’s very convenient to get to my office, it’s very convenient for doing shopping and it’s very comfortable here,” said Ryogi Iwasawa, 56, who moved into the complex this fall after taking an office job in Tokyo. He’s paying about \$30 per month on utility bills, 25 percent less than in his last home, in Sendai.

“We’re all more aware of energy since the disaster,” said Iwasawa, whose tiny one-room apartment looks out over the train-station’s grass-covered roof. “People my age are very aware of the environment and saving energy and CO2.”

In the United States, microgrids have been created on corporate campuses and military bases. In the Bay Area, the Santa Rita Jail in Dublin created one in 2012 with the help of Chevron Corp. It protects the facility's power supply from interruption and lowering its annual energy bills as well.

Honda wants to bring the same kind of self-sufficiency to private homes. Twenty-four miles away from the Kashiwa-no-ha Smart City, the automaker has built two houses that can generate their own power — from multiple sources — when disaster strikes.

They lie across a busy street from Saitama University, which helped design them, and from the outside, they look no different from the rest of the neighborhood. But each features the “Honda Smart Home System,” which combines thin-film solar panels on the roof, a battery in the carport, and a small, stationary engine that produces both electricity and heat for the home.

### **Smart home system**

The engine, developed by Honda, sits in a waist-high cabinet, runs on natural gas and is twice as efficient as a typical large power plant. With energy-management software orchestrating all the home's features, including a battery-powered version of the Honda Fit car parked outside, Honda estimates that residents can cut their carbon dioxide emissions 50 percent. A Honda employee and his family are living in one of the homes as an experiment, while the other is used solely for demonstrations. (Honda built a similar home at UC Davis).

Honda designed its houses to tap multiple energy sources in the wake of a disaster. Solar panels can't generate electricity at night — hence the home battery. And in some areas devastated by the 2011 earthquake, natural gas service was restored before electricity, one of the reasons Honda's smart homes include a gas-fired engine.

“Lots of sources are required in case of emergency,” said Naohiro Maeda, manager of Honda's community planning department. Although companies have been developing smart homes for many years, the 2011 earthquake, tsunami and nuclear accident changed how Honda thought about them, he said.

“After that, 'smart' is thinking about all cases — especially emergency cases — how to guarantee a good life,” Maeda said. “That is the new meaning of 'smart.'”

*David R. Baker is a San Francisco Chronicle staff writer. He recently traveled to Japan on a tour organized and funded by the Foreign Press Center/Japan, a nonprofit that arranges briefings and programs for foreign journalists living in or visiting the country. E-mail: [dbaker@sfchronicle.com](mailto:dbaker@sfchronicle.com) Twitter: @DavidBakerSF*

## 2015 Commission Meeting Dates

Please complete this form and email it to the  
Commission Inbox by: **Thursday, January 8, 2015**

Name of Commission: Public Works Commission

Commission Secretary: Sean Rose

### Please Note the Commission Meeting Dates for 2015 Below

Please fill in meeting date below. If no meeting for the month is scheduled please note as "No Meeting."

*"Example"*

Month	Meeting Day and Date	Time
January 2015	Friday 1/02/15	7:00 pm

Month	Meeting Day and Date	Time
July 2015	No Meeting	

## 2015 Meeting Dates

Month	Meeting Day and Date	Time
January 2015	Thursday 1/08/15	7:00 pm
February 2015	Thursday 2/05/15	7:00 pm
March 2015	Thursday 3/05/15	7:00 pm
April 2015	Thursday 4/02/15	7:00 pm
May 2015	Thursday 5/07/15	7:00 pm
June 2015	Thursday 6/04/15	7:00 pm

Month	Meeting Day and Date	Time
July 2015	Thursday 7/02/15	7:00 pm
August 2015	No Meeting	
September 2015	Thursday 9/03/15	7:00 pm
October 2015	Thursday 10/01/15	7:00 pm
November 2015	Thursday 11/05/15	7:00 pm
December 2015		

**Please Return via Email to:**

**The Commission Inbox-City Clerk Department**

Email: [Commission@CityofBerkeley.info](mailto:Commission@CityofBerkeley.info) Please contact Sheila Soo at x6916 with questions.