TO: ELA KERACHIAN

FROM: PONTE, MARILYN

SUBJECT: PARKING STUDY FINDINGS

DATE: NOVEMBER 14, 2017

We would like to share with you two recent parking studies we commissioned. The first includes 5 existing Prometheus communities in Santa Clara. The second includes Prometheus properties located near transit in Sunnyvale and Mountain View. The goal of these studies was to collect real time data to better understand parking demand for existing apartment communities in and near Santa Clara and for properties located in close proximity to CalTrain. The subject properties were selected because they are located in Santa Clara, or near transit and are newer rental communities of comparable/similar density.

The parking studies were conducted 9/12/17 through 9/16/17 and 10/14/17 through 10/19/17. The dates were specifically selected based on school being back in session and with the expectation that most households were finished with scheduled vacations. All counts were done at 3am which is considered a "peak" time for parking demand and included weekdays and weekends.

We found the results extremely interesting. The parking counts were consistent among all 5 communities in the first study with a parking demand ratio of 1.22 spaces/unit on the lower end to 1.29 spaces/unit on the higher end. It's interesting to note that Mansion Grove does not have any available street parking, therefore, if our residents have a car, on-site parking is their only option.

The second study also resulted in consistent parking demand with ratios ranging from .93 to 1.26. These subject properties were located in close proximity to CalTrain and other transit or are newer builds.

As a result of these findings and our proximity to transit and future transit, we are confident that the 575 Benton project will generate less parking demand than 1.65 spaces/unit, therefore we are revising our residential parking ratio to 1.5 spaces/unit which we feel is still conservative for this location, for a total of 536 residential parking spaces.

Providing fewer parking spaces is a common transportation demand management (TDM) measure which helps reduce vehicle miles traveled (VMT). It's also worth mentioning that many developers and designers are thinking of how to "future proof" parking structures. For example, developers and designers are working to innovate design today that will allow for conversion from parking to other uses such as lofts, residential or office, in the future when parking demand is anticipated to decrease as a result of self-driving cars, improved transit and services such as Uber, Lyft, and ZipCar (see attached Forbes.com article).

Please let me know if you have any questions. I would be happy to meet with you to review the parking study further if you like.

Santa Clara Apartments Parking Demand

		Hearth North		Hearth South		Cobalt		Park Central		Mansion Grove		Weighted Average	
		Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Apartment Units	1 bedroom units	129		114		118		85		502			
	2 bedroom units	160		145		104		88		494			
	3 bedroom units									4			
	Total Apartment Units	**289**		**259**		**222**		**173**		**1,000**		**1,943**	
	Total Bedrooms	**449**		**404**		**326**		**261**		**1,502**		**2,942**	
Parking Supply	Gated/Assigned Spaces	416		417		337		173		1,227		2,570	
	Guest/Unassigned Spaces	58		45		41		172		443		759	
	Total Parking Spaces	**474**		**462**		**378**		**345**		**1670**		**3329**	
	Parking spaces per unit	1.64		1.78		1.70		1.99		1.67		1.71	
	Parking spaces to bedroom ratio	1.06		1.14		1.16		1.32		1.11		1.13	
Parking Demand	Gated/Assigned Spaces	261	268	239	235	223	213	115	113	935	912	1773	1741
	Guest/Unassigned Spaces	50	55	43	43	30	35	97	106	382	373	602	612
	Street Parking	42	41	35	36	21	23					98	100
	Total Occupied parking spaces	**353**	**364**	**317**	**314**	**274**	**271**	**212**	**219**	**1,317**	**1,285**	**2,473**	**2,453**
	Occupied spaces per unit	**1.22**	**1.26**	**1.22**	**1.21**	**1.23**	**1.22**	**1.23**	**1.27**	**1.32**	**1.29**	**1.27**	**1.26**
	Occupied spaces per bedroom	**0.79**	**0.81**	**0.78**	**0.78**	**0.84**	**0.83**	**0.81**	**0.84**	**0.88**	**0.86**	**0.84**	**0.83**

Weekday parking counts were conducted on 9/12/2017-9/14/2017; weekend parking counts were conducted on 9/16/2017-9/17/2017.

Santa Clara Apartments Parking Demand

		Ironworks North			Ironworks South			Montrose			Madera			Biltmore			Weighted Average		
		Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday
Apartment Units	1 bedroom units		7			44			148			116			118				
	2 bedroom units		72			23			80			87			140				
	3 bedroom units		38			0			0			0			8				
	Total Apartment Units		**117**			**67**			**228**			**203**			**266**			**881**	
	Total Bedrooms		**265**			**90**			**308**			**290**			**422**			**1,375**	
Parking Supply	Gated/Assigned Spaces		227			91			307			313			277			1,215	
	Guest/Unassigned Spaces		17			18			47			29			206			317	
	Total Parking Spaces		**244**			**109**			**354**			**342**			**483**			**1532**	
	Parking spaces per unit		2.09			1.63			1.55			1.68			1.82			1.74	
	Parking spaces to bedroom ratio		0.92			1.21			1.15			1.18			1.14			1.11	
Parking Demand	Gated/Assigned Spaces	130	131	133	33	31	35	176	171	175	175	167	175	64	68	63	578	568	581
	Guest/Unassigned Spaces	15	14	15	14	12	13	43	41	40	11	8	9	183	175	182	266	250	259
	Street Parking	1	0	0	7	5	4	0	0	0	24	24	30	32	32	35	64	61	69
	Total Occupied parking spaces	**146**	**145**	**148**	**54**	**48**	**52**	**219**	**212**	**215**	**210**	**199**	**214**	**279**	**275**	**280**	**908**	**879**	**909**
	Occupied spaces per unit	**1.25**	**1.24**	**1.26**	**0.81**	**0.72**	**0.78**	**0.96**	**0.93**	**0.94**	**1.03**	**0.98**	**1.05**	**1.05**	**1.03**	**1.05**	**1.03**	**1.00**	**1.03**
	Occupied spaces per bedroom	**0.55**	**0.00**	**0.56**	**0.60**	**0.53**	**0.58**	**0.71**	**0.69**	**0.70**	**0.72**	**0.69**	**0.74**	**0.66**	**0.65**	**0.66**	**0.66**	**0.64**	**0.66**

Weekday parking counts were conducted on October 17-19, 2017; weekend parking counts were conducted on October 14-15, 2017.

Forbes / Business / #GettingBuzz
AUG 10, 2017 @ 09:32 AM 1,713

Cars May Not Be In Parking Garages' Future

Bisnow, CONTRIBUTOR
We are the world's #1 source for commercial real estate news FULL BIO
Opinions expressed by Forbes Contributors are their own.

POST WRITTEN BY
Kyle Hagerty

Between ride sharing, bike sharing, car sharing, walkability and automated vehicles, the future of the car has never been so uncertain. Designers are looking at the mausoleums we build for them and asking themselves what the parking garage can be used for next. Gensler's Peter Merwin leads the firm's national mixed-use practice and spends much of his time figuring out ways to mitigate the tyranny of the automobile.


Courtesy: Cope Linder Architects
Parking garage [+]

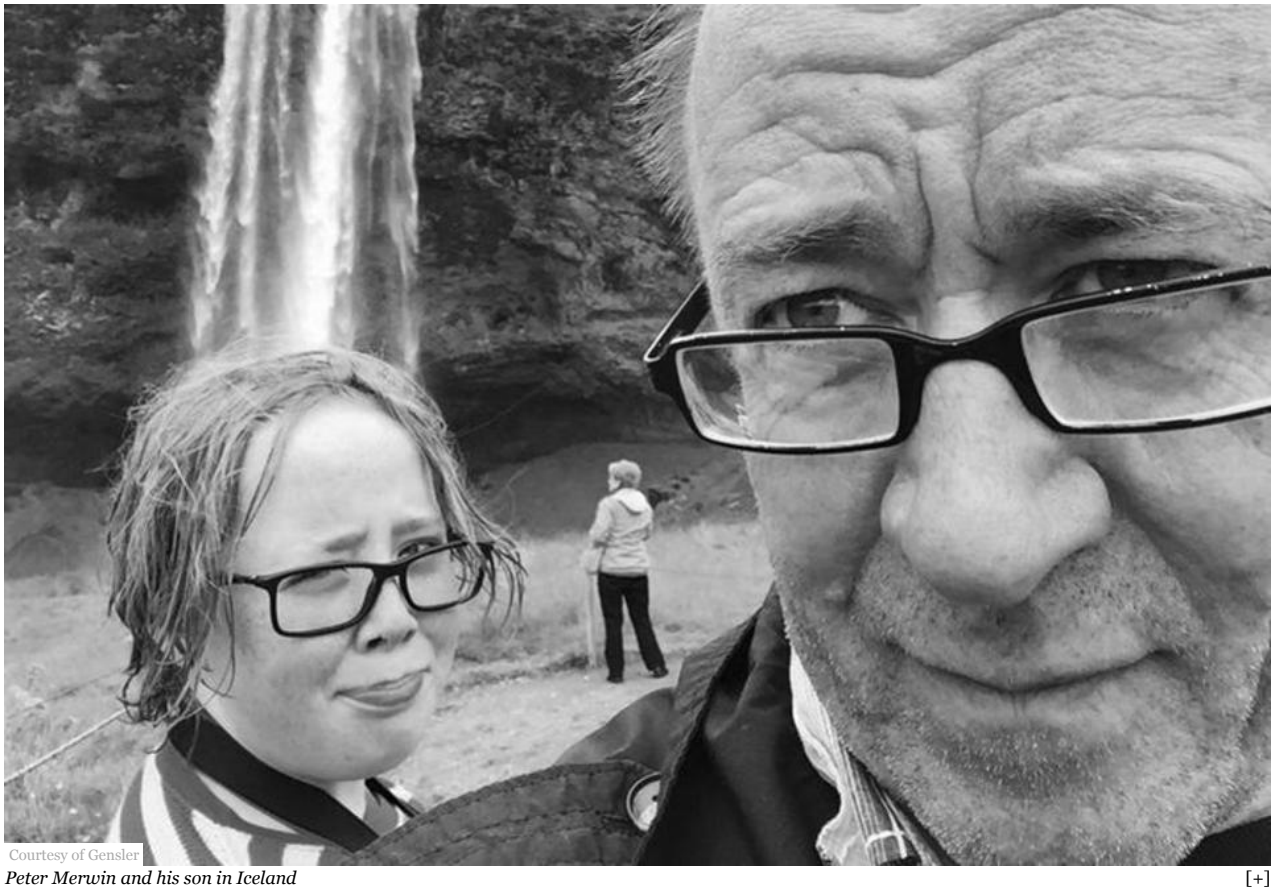
"I can tell you, every project I'm working on, I talk about the future of garages in the development," Merwin said.

He believes the shift to automated vehicles and alternative transportation could be one of the single-largest windfalls of real estate. Increasing the percentage of cash-generating real estate would put more dollars into

the coffers of cities, resulting in better infrastructure, better schools and fewer potholes. Likewise, developers would earn more profit.

“I'm an urbanist. I firmly believe if we can get a handle on getting cars out of people-places, we’ll be much happier, and have much more productive real estate,” Merwin said.

With so much space dedicated to parking, a decrease in parking needs could radically shift the design paradigm. But it is still unclear how quickly and to what extent that will happen. Meanwhile, how can developers future-proof parking?



Courtesy of Gensler

Peter Merwin and his son in Iceland [+]

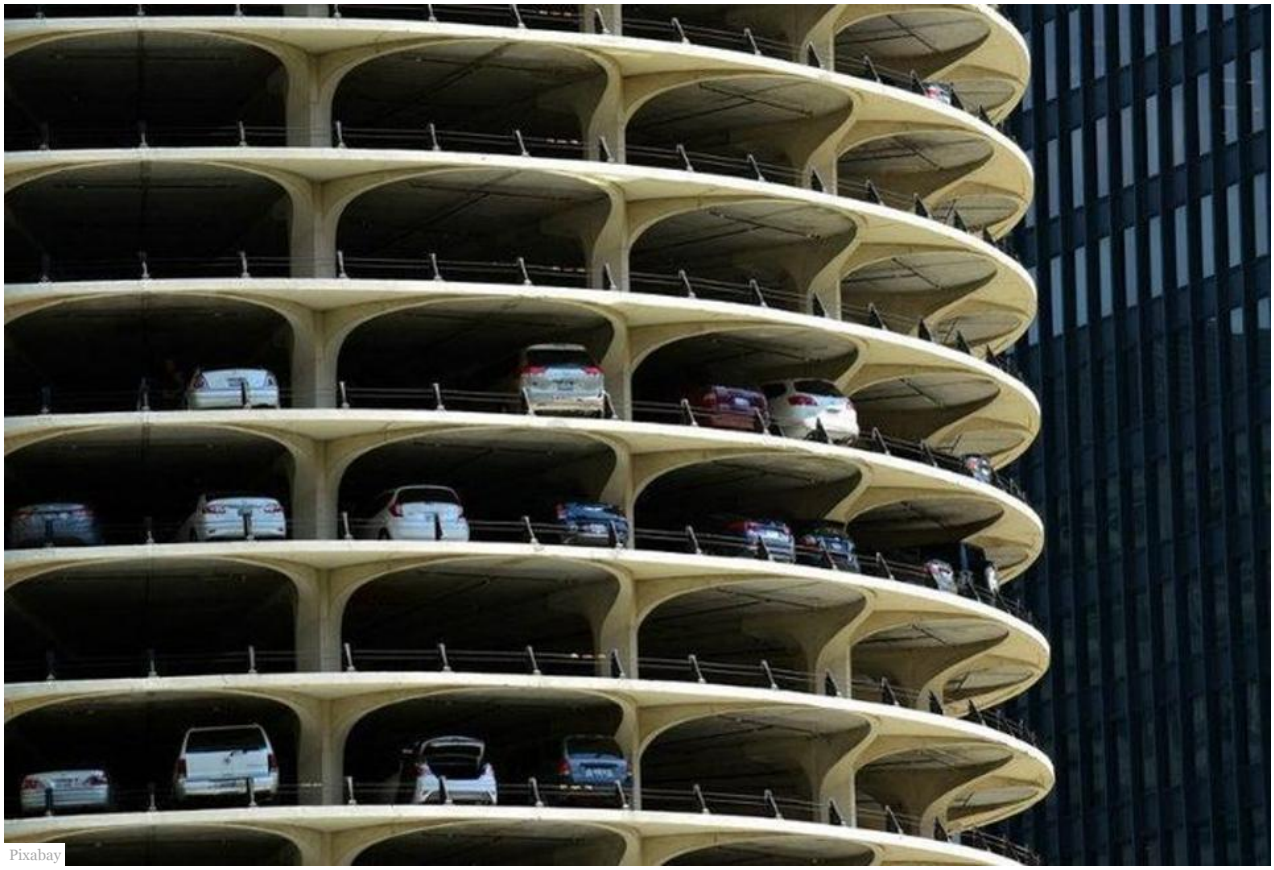
Merwin said the two most important design strategies are flat plates and large floor-to-floor heights. Any future use will require level ground rather than the steep slopes typical to garages, so designing flat floors on every level is critical.

To convert to residential, developers need a minimum 11-foot floor-to-floor height. That allows designers to properly core the infrastructure and build out the space. Merwin thinks the best way to future-proof a parking garage is with a 15-foot floor-to-floor height. That opens up the option to convert each floor into lofts, residential, retail or office. Another added benefit is that in the event you need *more* parking, not less, you can convert a 15-foot level into a double stacking parking floor like those in operation in many dense metros.

Courtesy of Gensler
Fairview District Garage [+]

The cost of future-proofing parking garages is marginal, Merwin said. Developers simply must build taller columns (about five feet more concrete per column) with a little additional steel.

Merwin is using this strategy in the Fairview District parking garage in Houston's Montrose neighborhood. The structure has one ramp, flat plates and ample floor-to-floor height, perfect for future conversion.



Pixabay

Parking garage [+]

More often that not, parking is not wholly up to designers. Cities tightly control parking minimums and regulations, and Merwin is starting to challenge some of those rules. His biggest beef is with parking requirements near bars. Although bars are some of the heaviest users of parking, typically 12 spaces per thousand, he thinks it is absurd that cities require higher parking minimums there.

Merwin thinks the requirement should be zero. He believes requiring parking at a bar is almost asking for a problem; particularly with alcohol involved, it would be better to encourage customers to walk, Uber or take public transit. That possibility is far off, but Merwin is still having the conversation in anticipation of having practice meet jurisdiction.

Flickr/Benjamin Vander Steen

Seattle's Sinking Ship parking garage [+]

Some cities are already throwing out the rule book, allowing developers to build far less parking if the development is near public transit. In Seattle, it is now legal to build apartments with no parking in certain neighborhoods. A recent study found that parking minimums are costing Seattle renters $246/month. Developers are eager to capitalize on the new ordinance and lower their costs — the city has a waiting list of parking-free building proposals.

“A lot of people will start seeing a lot of these different shared services and say, ‘OK, I don’t actually need to own a car,’” Seattle Department of Transportation Director Scott Kubly told Wired.