# bae urban economics

## Memorandum

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From: Matt Kowta, MCP, Principal

Date: September 30, 2013

DPFG Memo to Tim Taron, dated 9-16-2013 Re:

The DPFG memo advocates for the City of Woodland to consider housing growth rates for the Woodland General Plan Update planning period that are more aggressive than the current SACOG projections for the City of Woodland for the 2008 to 2035 time period. For reference, the SACOG growth projections anticipate that Woodland will grow at a rate averaging 193 units per year for the period.

The DPFG memo presents several alternative growth scenarios for the 2008 to 2035 time period, including:

- 1) **SACOG+10%** A scenario that assumes actual housing unit growth will be 10% greater than SACOG's projections. (212 units per year)
- 2) DOF A scenario that looks at the CA Department of Finance estimates for 2001 and 2010 housing unit growth in Woodland and assumes that this same growth rate will continue through 2035. (269 units per year)
- 3) Existing City Policy A scenario that assumes the City of Woodland would grow at a rate equal to the maximum 1.7 percent annual growth rate cap established by Measure B. (391 units per year)
- 4) **CSER** A scenario that was selected from a range of scenarios prepared by the Center for Strategic Economic Research, at the request of DPFG. (384 units per year)

The implication of the DPFG memo is that, based on more aggressive assumptions about the housing unit growth that Woodland will sustain through 2035, the City of Woodland should include more land for residential development than what is left to be developed within the Spring Lake Specific Plan (SLSP) area, the Master Plan Remainder Area (MPRA), and other available residential land within the City of Woodland.

#### **Commentary on DPFG Growth Projections**

Considering alternative growth scenarios is a useful exercise in a long-range planning process, when there are many factors which could have an unanticipated effect on outcomes. It is also important to maintain a level of perspective on what the different scenarios represent, particularly when the scenarios are proposed by parties that may have a vested interest in the

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use of aggressive growth assumptions. Following is some commentary on each of the alternative scenarios that the DPFG memo offers.

**SACOG+10%** - This is a simple scenario and one that could be considered. The DPFG memo does not provide any analysis to suggest that it is any more likely to occur than the SACOG projections themselves; however, for the purposes of conducting sensitivity analysis, this might be an appropriate scenario to test what would occur if SACOG has under-estimated the City's potential housing growth. For a more balanced presentation, it might have been useful for DPFG to also present a "SACOG minus 10%" scenario, to test what would occur if SACOG has over-estimated Woodland's housing growth. It should be noted that after corrections for the global methodological issues discussed below, this growth scenario could be accommodated with an approximately 16 percent buffer if considering only the SLSP and MPRA housing unit capacity, and a greater buffer if acknowledging additional residential development capacity identified in the City's 2009 Housing Element outside of these areas.

**DOF** – This scenario identified housing unit growth for a limited number of years (2001 to 2010) and assumed that the City of Woodland would grow at the same average rate for a 27-year time period. First, it is axiomatic that past results do not predict future performance. Second, it is risky to pick a relatively short period of time upon which to base a long-term growth projection. For example, while this scenario estimates that Woodland will build an average of 269 housing units per year over a 27-year period, or an average annual growth rate of 1.2 percent per year, if DPFG had instead chosen to consider a broader time period that more fully reflected not only the boom period leading up to the 2008 housing crash but also the extended recovery period that was still under way as of 2013, the average annual growth rate would have been 1.0 percent; much closer to the rate that SACOG projects for Woodland.

If this scenario were modified to use a 1.0 percent annual growth rate, and to match a 22-year projection period to the City's 2013 available land supply considering only the SLSP and MPRA residential capacity, as discussed below, the growth from the 2013 base would be 4,811 units, which could be accommodated with a 12 percent buffer, or a greater buffer if considering the additional residential development capacity identified elsewhere in the City, in the City's 2009 Housing Element.

**Existing City Policy** – This scenario considers what would happen if the City grew at a rate equal to the 1.7 percent annual rate associated with the 1996 growth cap. The DPFG memo provides no analysis as to whether this scenario should be considered more or less likely to occur than the SACOG projections. It should be noted that in looking at historic growth rates for the City of Woodland, this rate of growth would substantially exceed the growth rate experienced between 1990 and 2000 (1.4 percent), the growth rate experienced between 2001 and 2013 (1.0 percent) and the longer-term growth rate between 1991 and 2013 (1.3 percent). In addition, the 1.7 percent growth rate would also suggest that Woodland's growth in housing units would be substantially faster than DOF's population projections for Yolo County between 2010 and 2035 (1.1 percent per year) and more than twice as fast as DOF projects for California's population growth for that same time period (0.8 percent per year).

**CSER** – This scenario draws from one of six different projection scenarios that CSER created on behalf of DPFG. After generating six different projection scenarios, CSER elevated four of those scenarios for further discussion in their memo to DPFG. Of the four scenarios that CSER elevated, DPFG has chosen to highlight the scenario that suggests the highest possible housing unit growth in Woodland. The residential growth rate associated with this scenario is similar to the growth rate associated with the "Existing City Policy" scenario just discussed. This scenario is based on Sacramento Region growth projections prepared by Woods & Poole Economics, Inc., a Washington, DC-based consultancy that prepares growth projections for every county in the U.S. CSER's report to DPFG compares Woods & Poole's 2035 population projection for the Sacramento Region with the projections produced by SACOG, Caltrans, and DOF shows that Woods & Poole produces the highest number of the four. This suggests that this scenario in particular should be viewed as an "aggressive" scenario, and not a most likely scenario by any means. In fact, in CSER's report to DPFG, CSER characterizes this scenario as "High", and positions the SACOG MTP/SCS projections as falling in the middle of the four that scenarios that CSER highlighted, with two of CSER's scenarios producing higher growth estimates and two producing lower estimates than SACOG's.

In discussing the different projection scenarios that it generated, the CSER report states: "The projections were prepared simply to provide varying estimates of future growth potential and are not meant to incorporate judgments about the likelihood of the projection results or embedded assumptions. Moreover, the local projections were not influenced by growth constraints or any of the public policy, regulatory, market, or infrastructure factors that SACOG assessed when developing the projections for the MTP/SCS." A case can be made that SACOG's projections for Woodland's long-term growth, which begin with regional growth projections prepared by the Palo Alto-based Center for the Continuing Study of the California Economy, and which are then allocated down to the individual jurisdiction level by SACOG, are likely to have been able to incorporate much more of an awareness of local factors that would influence long-term growth than the Woods & Poole projections. With an implied average annual growth rate that is similar to that of the "Existing City Policy" scenario, this scenario would also result in growth rates that are significantly above growth rates observed during the 1990 to 2013 time period, and also significantly above the population growth rates projected by DOF for both Yolo County and the State as a whole.

#### Global Methodological Issues in DPFG Memo

The DPFG memo overstates its case due to a couple of methodological issues. First, the DPFG memo assumes that the available land supply discussed in the Economic Background Report must accommodate 27 years of residential growth under any of the given growth scenarios that is presents. This is not the case, as the Economic Background Report discussed the residential land supply that was available as of 2013. To be consistent with the time period being used by the General Plan Update team, the DPFG projections should be adjusted to reflect growth potential between 2014 and 2035. If this was done, DPFG memo Table 1 would have projected 4,053 units, (1,150 fewer) units under the SACOG scenario; 4,452 units (1,271 fewer) under the SACOG +10% scenario; 5,649 units (1,614 fewer) under the DOF Est. scenario; 8,211 units (2,348 fewer) under the Existing City Policy scenario; and 8,064 units (2,317 fewer) under the CSER Alt. scenario.<sup>1</sup>

Second, Table 1 of the DPFG report only considers the remaining SLSP lots and the MPRA lots as available to accommodate the City of Woodland's future residential development. Although

<sup>&</sup>lt;sup>1</sup> These calculations take the total housing unit growth suggested by DPFG Table 1 and divide it by the 27-year projection period indicated, and then multiply the result by 21 years, to reflect a 2014 to 2035 time period consistent with that used for General Plan Update purposes.

the Economic Background Report was not able to quantify the residential land supply available elsewhere within the City to accommodate future growth, it did mention such land as contributing additional capacity to accommodate residential growth. For example, the City's existing Housing Element, prepared in 2009, estimated a residential housing capacity of 657 housing units in various locations within the City, and outside of the SLSP. The Housing Element also identified a number of other residential sites that were approved for development as of 2009, but which may or may not have been developed since that time.

#### Alternative Growth Projections Prepared by BAE

Separately, BAE prepared two growth projection scenarios that consider methods other than those utilized in the DPFG memo. The first projection series in Exhibit A presents the SACOG MTP/SCS growth projections for Woodland, which were referenced in the Economic Background Report, and from which the 193 units per year residential growth average was derived. The second series projects growth assuming that Woodland maintains its 2008 share of the region's population as the region grows per SACOG's projections. The third projection series assumes that Woodland maintains its 1990 to 2010 housing growth rate. The fourth projection series presents the SACOG MTP/SCS projections for the region, for reference. As shown in Exhibit A, the two alternative growth projections for Woodland would result in greater rates of housing development than suggested by the SACOG projections but they still suggest growth residential growth for Woodland between 2014 and 2035 that are less than the two higher end rates suggested by the DPFG memo after the DPFG growth is adjusted for the same 2014 to 2035 time period. The mid-point range of the BAE projections shown in Exhibit A (5,478 new units between 2014 and 2035) is approximately equal to the mid-point of the adjusted DPFG estimates (5,659 units between 2014 and 2035).

#### Summary/Conclusions

The DPFG memo presents a range of growth projection scenarios as alternatives to the SACOG projections for the City of Woodland's housing development growth through the year 2035. As discussed above, the DPFG memo does not attempt to argue that any of the alternative projections are any more likely to represent Woodland's actual growth for the period than the SACOG MTP/SCS projections. However, based on the discussion above, it should be concluded that the DPFG's two most aggressive scenarios, the "Existing City Policy" and the CSER scenario, are not likely, given that they would substantially outpace growth rates observed in Woodland between 1990 and 2013, and population growth rates projected by DOF for both Yolo County and the State. The DPFG memo's SACOG+10% and DOF scenarios imply residential growth rates that are much closer to the SACOG growth rate and the growth rates associated with the alternative growth projection scenarios that BAE developed.

If the goal of the DPFG memo is to present a series of alternative projections so as to conduct a sensitivity analysis of the relationship between residential growth projections and the City's residential land supply, then two methodological issues in the memo need to be corrected. First, the growth projections need to reflect the time period between the present time and the 2035 General Plan time horizon. This would necessitate that the memo's growth projections be modified to reflect the time between the present and 2035, versus the 27-year period between 2008 and 2035 used in the DPFG memo. Additionally, the memo should acknowledge that in addition to the residential capacity in the SLSP and MPRA areas, the City of Woodland can also accommodate additional residential development within the City, such as additional residential development capacity identified elsewhere in the City, in the 2009 Housing Element. If these changes are made, the memo's conclusions regarding the need for

Woodland to designate new land for residential development might not be contradicted entirely, but the case would be much weaker. It may also be appropriate for the DPFG memo to present some of the lower end projections that the CSER memo provided, in addition to the "High" growth scenario upon which the DPFG memo focuses.

The DPFG memo re-iterated a point made in the General Plan Economic Background Report, which was that it is appropriate for a jurisdiction to plan for a land supply that has a buffer beyond that which is needed to accommodate projected growth. The following re-states information presented in the General Plan Economic Background Report and demonstrates that considering the development potential remaining in SLSP, plus development potential in the MPRA, plus additional residential development potential in the City, Woodland has sufficient capacity to accommodate the growth projected by SACOG through 2035:

Applying the 193-unit average annual growth rate from the SACOG projections to the 22-year period between 2013 and 2035 yields housing unit growth of 4,246 units through the General Plan time horizon. Comparing this to the roughly 5,400 units remaining to be built (as of early 2013) in the SLSP and the MPRA, indicates that there is an approximately 27% buffer between SACOG's projected growth for Woodland and just the land available in SLSP and MPRA.

If it is assumed that most of the other residential development capacity identified in the 2009 Housing Element still remains, this buffer would increase substantially, to more than 40%. It could be argued that this amount of buffer is adequate to allow for the fact that SACOG might have under-estimated Woodland's growth potential, and also allow for the fact that some of the residential land that has been identified as available for development may not actually be available. Further, it is unlikely that the City will wait until 2035 to update its General Plan again and consider whether it is appropriate to designate additional land for residential development. Thus, the 40% buffer might be considered a conservative calculation.

In addition to having a reasonable buffer under the SACOG projections growth scenario, the discussion above has demonstrated that Woodland would also have a buffer, albeit diminished, under the SACOG+10% scenario. If the "DOF" scenario were modified with a broader 2001 to 2013 time period to serve as the baseline growth assumption, it too would have at least a minimal buffer of residential capacity. Again, these calculations assume that the existing 5,400+ unit residential capacity would have to suffice for the entire General Plan time horizon, through 2035, when in fact the General Plan will likely be updated again before 2035.

Notwithstanding all of the preceding discussion, it must be acknowledged that there are many factors which cannot be identified at this time which may impact the City's growth rate over time. In addition, the City could adopt a policy stance that calls for the City to seek to grow more quickly than the available projections would suggest. If the City wishes to make a policy decision to build the potential into the General Plan to accommodate residential growth that is substantially greater than what is projected by SACOG through 2035, the City should consider building mechanisms into the General Plan to ensure that growth proceeds in an orderly and efficient manner, in a pattern that would best serve the City's needs, including fiscal, environmental, and quality of life considerations. One such factor is ensuring the efficient utilization of infrastructure, so that costs to end-users are as economical as possible. For example, the DPFG memo mentions that development in the MPRA is targeted for payment of

fees for reimbursement for oversizing infrastructure in SLSP. If this is the case, to avoid an outcome that is less than optimal, the City would want to ensure that MPRA does develop in a timely manner and this may mean that development in other areas should be phased so that it does not adversely affect the ability and timeliness of reimbursement of funds from MPRA to SLSP for infrastructure investments that have already been made. This principle would be equally important regardless of which growth rate scenario plays out in Woodland over the next 20 to 25 years. In addition, an efficient land use pattern and an orderly approach to growth may have fiscal benefits to the City, in terms of ensuring that the City can most economically expand its services as growth occurs. It would likely be more expensive, and less fiscally beneficial, if the City grows in many different locations at once, as opposed to growing in a limited number of locations at a time.

### Exhibit A: Alternative Woodland Growth Projections

Jurisdiction		2014	2020	2025	2035	2008 to 2035 Avg./Year	2008 to 2035 Avg. Growth/Yr.	14 to 35 Total Growth	14 to 35 Avg. Ann. Growth
	2008								
Woodland (SACOG MTP)									
Dwelling Units	19,047	20,324	21,329	22,302	24,250	193	0.9%	3,926	0.8%
Total Jobs	25,255	26,536	27,726	29,011	31,576	234	0.8%	5,040	0.8%
Woodland (Maintain 2008 Share of Region)									
Dwelling Units	19,047	20,092	21,610	22,928	25,570	242	1.1%	5,478	1.2%
Total Jobs	25,255	26,558	27,921	30,158	34,634	347	1.2%	8,076	1.3%
Woodland (Maintain 1990 to 2010 Housing Gro	wth Rate and	Maintain 2008	jobs/dwelling	unit ratio)					
Dwelling Units	19,047	20,727	22,556	24,202	27,864	327	1.4%	7,137	1.4%
Total Jobs	25,255	27,483	29,908	32,091	36,946	433	1.4%	9,463	1.4%
SACOG Region Total (SACOG MTP)									
Dwelling Units	885,065	933,635	1,004,158	1,065,387	1,188,188	11,227	1.1%	254,553	1.2%
Total Jobs	969,841	1,019,890	1,072,232	1,158,135	1,330,013	13,340	1.2%	310,123	1.3%

Sources: SACOG, 2012; BAE, 2013.