# SCHOOL BONDS - THE UNTOLD STORY OF ASSESSED VALUES 


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## SUMMARY

The 2013-2014 Orange County Grand Jury has found that taxpayers in the Savanna, Westminster and Cypress Elementary School Districts in northern Orange County will potentially pay significantly higher property tax rates to repay school construction bonds in future years than what voters expected.

These potential higher taxes are likely to result from the assessed values of property in all three of these school districts not growing at the unrealistically high rates projected by the school districts when they asked their voters to approve the bond measures.

The Grand Jury has also found that the money raised through these bond issues has been spent on required capital investments. All three of these districts were faced with schools that in some cases had not been renovated in over 50 years. These districts are making tremendous progress in bringing their schools up to a $21^{\text {st }}$ Century standard.

There has been a considerable amount of negative publicity surrounding Capital Appreciation Bonds (CABs) used for school construction financing over the last several years in Orange County. The issue exploded in 2012 with the revelation that a school district in San Diego County had obtained $\$ 105$ million for school construction by floating CABs that will repay the bond investors $\$ 981$ million over a 40 -year term. ${ }^{1}$ This translates to the school district paying approximately $\$ 9$ in interest for every $\$ 1$ of principal over the 40 -year repayment period of the bonds.

The Orange County Register and Los Angeles Times have also published numerous articles on the use of CABs in southern California, including Orange County. The key point that comes out of these articles is that some school districts have chosen to employ very expensive CABs for financing school construction. These CABs can have the ratio of interest to principal paid over the term of the bonds as high as $20: 1$ on individual bonds. It's not hard to see why taxpayers become upset when they come to understand the amount of interest being paid on these CABs.

While the issue of paying excessive interest with CABs has been well documented, there has been very little attention focused on the potential for taxpayers in some of the districts with CABs to be faced with significant tax increases in the coming years. A very close approximation of the bond issue tax rate for each property owner in a school district is calculated each year by dividing the total annual bond issue debt service (principal and interest) for the school district by the total assessed value of the properties in the school district and multiplying that result by $\$ 100,000$. When a bond issue is put before the voters for approval, the school district must project the growth of assessed values in the school district over the term of the bond (for example, 25 years) in order to provide the voters with an estimate of future tax rates.

[^0]At the time bonds are sold, the district must confirm the bond issue tax rate does not exceed the following legally mandated thresholds over the term of the bond:

1. $\$ 30$ per $\$ 100,000$ of assessed values for elementary and high school districts
2. $\$ 60$ per $\$ 100,000$ of assessed values for unified school districts

Since the debt service required to repay the bond is known, based on the interest rate and term of the bond, the assumption that the school district makes for future growth of assessed values is critical. If the school district is conservative in their growth assumptions for assessed values based on historical averages, then the resulting bond issue tax rate for future years should not exceed the legally mandated $\$ 30$ or $\$ 60$ per $\$ 100,000$ of assessed value. However, if the school district is overly optimistic in projecting future growth in assessed values, then it is very possible that the tax rates will exceed the legally mandated levels. The Grand Jury has found there is a strong possibility that taxpayers in the Savanna, Westminster and Cypress Elementary School Districts will be faced with bond issue tax rates significantly higher than what was presented when the voters approved the bond issues.

## REASON FOR THE STUDY

Due to the uproar over CABs (a CAB is a bond where payment of the principal and interest is deferred until the end of the term of the bond) created by the negative media attention, the California legislature passed AB 182 in October 2013 and it became effective on January 1, 2014. The key changes enacted to the Government and Education Codes ${ }^{2}$ relating to school bonds were:

1. Interest rates were capped at 8 percent
2. The debt ratio of interest to principal paid for each bond series was limited to $4: 1$
3. CABs must be callable after 10 years (i.e. have the option to be paid off prior to maturity)
4. The maximum term of the CAB was reduced from 40 years to 25 years

These changes to the Government Code relating to school bonds will solve some of the most egregious problems with CABs. Unfortunately, many school districts are stuck with CABs that predate this change to the California Government Code.

However, there has been virtually no publicity concerning the implications of debt service repayment for CABs, specifically the magnitude of potentially higher taxes. There is potential for some school districts, through the County, to increase property taxes well beyond what was presented when the bonds were issued in order to repay the CABs. CABs are often back loaded, with the payment of both principal and interest deferred many years into the future. Through the power of compound interest over a long term, the annual debt service (principal and interest

[^1]payment) requirements in the later years of the bonds can increase by up to a factor of 10 or above from the debt service for the first year of the bond.

This study explores the implications of debt service repayment for CABs, particularly for the Westminster, Cypress and Savanna Elementary School Districts located in northern Orange County. Other issues concerning CABs, such as the excessive interest being paid where the debt ratio of interest to principal paid over the term of the bond can be as high as 20:1, have been explored in detail in the media. These other issues with CABs are not the focus of this study.

## BACKGROUND AND FACTS

## History of Key Legislation Governing School Bond Financing

Although this study is not intended to provide a detailed history of the laws governing school bond financing in California, it is important to highlight the more relevant provisions of the law. One key provision limits elementary (K-6 or K-8) and high school (7-12 or 9-12) districts to a bonding capacity limit of 1.25 percent of assessed property values in the district and unified (K12) districts to a bonding capacity of 2.5 percent. These bonding capacity rates were enacted in a revision to the California State Constitution in 1879. ${ }^{3}$ The other key metric concerning school bond financing is the limitation of the tax rate paid by each property owner in the district for an approved school bond election. The projected tax is limited, based on the school district's AV projections, to no more than $\$ 30$ per $\$ 100,000$ of the property owner's assessed value for elementary and high school districts and $\$ 60$ per $\$ 100,000$ for unified districts. This provision comes from Proposition 39, which was passed by the California voters in $2000^{4}$ and the Strict Accountability in Local School Construction Bonds Act of 2000.

Proposition 13 is also important to understand within the context of school bond financing. Proposition 13 was passed by the California voters in 1978. Increases in assessed property values were limited to a maximum of $2 \%$ per year for property that had not been sold. Properties are re-assessed to market value when they are sold except under very specific circumstances detailed in Proposition 13. Local school districts were also prohibited from levying additional taxes to fund school bonds. As a result, local school districts, and the State as a whole, were severely limited in their ability to finance local school construction and reconstruction, after Proposition 13 was passed in 1978.

Several subsequent propositions were passed that figure prominently into school bond financing. Voters passed Proposition 46 in 1986, which returned the authority to local school districts to finance school bonds with the requirement that the bond issue be approved by two-thirds of the voters. Proposition 39, which was passed by California voters in 2000 and the Strict Accountability in Local School Construction Bonds Act of 2000, lowered the threshold for

[^2]school bond approval from two-thirds to $55 \%$ percent of the votes subject to these key provisions:

1. The district is required to set up a citizen's oversight committee to monitor and ensure bond funds are being properly spent.
2. Specific projects must be identified and documented that will be built using funds from the bond issue.
3. The district must perform annual performance and financial audits.
4. The tax rate for the entire series of bonds from a single election cannot exceed $\$ 30$ per $\$ 100,000$ of assessed values for the district for elementary and high school districts, $\$ 60$ per $\$ 100,000$ of assessed values for unified districts over the term of the bonds.

School districts still have the option to ask for approval for a school bond subject to the provisions of Proposition 46, which requires two-thirds approval by the voters. The vast majority of school districts in California have chosen to ask for school bond approval subject to the provisions detailed above for Proposition 39 since only $55 \%$ of the voters must approve the bond issue.

The most recent change to the laws regarding school bond financing was the enactment of AB 182 in October 2013, to reform the use of CABs, which was previously discussed in this study.

## General Obligation Bonds

General Obligation Bonds are voter-approved bonds that are backed by unlimited ad valorem taxation of the school district. Ultimately, the county of Orange, not the local school district, determines the tax levy to repay the bonds. School Bonds fall into the ad-valorem category of taxes, i.e. an ad-valorem tax is a tax that is in addition to the normal property taxes that a property owner pays. The bonds are repaid from tax revenue collected within the local school district. Since the bond repayment schedule is known, the tax rate required to repay the bonds is calculated annually by the Orange County Auditor-Controller after the assessed values for all of the properties within the school district are determined for the year.

When a school district puts together a bond issue, they have to project the growth in assessed values (AV) over the term on the bonds being issued. The tax rate required to repay the bonds is then calculated based on the assumed AVs and the known bond repayment schedule. By law, the school district issuing the bonds (Proposition 39 bonds) is required to confirm that the tax rate required to repay the bonds will not exceed $\$ 30$ per $\$ 100,000$ of AV for elementary and high school districts; $\$ 60$ per $\$ 100,000$ for unified school districts over the term of the bonds. This can become an issue when the school district issuing the bonds is overly optimistic in their projections for the growth in AVs in future years. If the school district overestimates the growth in AVs and is already projecting a tax rate close to the $\$ 30$ or $\$ 60$ threshold, it is conceivable the tax rate required to repay the bonds in future years will exceed the $\$ 30$ or $\$ 60$ per $\$ 100,000$ limit mandated by law. If this happens, there is no recourse if the bonds cannot be refinanced due to
a no-call provision in the bond or the presence of higher interest rates than when the bond was issued, which makes refinancing impractical. Even if the bond can be refinanced, the district will incur significant costs in the re-financing process. The school district taxpayers are on the hook to pay the taxes required to repay the bonds, even if the tax rate exceeds the $\$ 30$ or $\$ 60$ per \$100,000 legal limit.

There are two primary types of general obligation bonds typically used to finance school construction with a number of derivatives of each type of bond. The most common type of bond is called a current interest bond (CIB). A CIB typically pays the interest due twice a year and the principal is repaid either at the end of the term of the bond or in a series of annual principal payments toward the end of the term of the bond. A Capital Appreciation Bonds (CAB) typically defers the payment of both the principal and interest until the end of the term of the bond. The interest accretes, which means the interest due each year continues to accrue, or accumulate, until the entire amount of interest due is paid for the CAB at the end of the term of the CAB. Since the interest is not paid when it is accrued, the interest cost compounds, which can have a dramatic effect of the total interest paid over a long term, for example 30 or 40 years.

Since a CIB pays the interest in the same time frame it accrues, the overall interest cost is much less than a CAB, where all the interest is deferred until the end of the term of the bond. Most CIBs have a debt ratio of interest to principal between $1.5: 1$ and $3: 1$ over the term of the bonds. CABs can have debt ratios that can range from as low as 1.05:1 to as high as 20:1 over the term of the bonds. The recent enactment of AB 182 has limited the debt ratio for on new bond series to a maximum of 4:1.

## Why Do School Districts Use CABs?

One of the big advantages of CABs is the school district may use the money immediately for school improvements but defer the payment of principal and interest into the future. This is particularly important for school districts with bond issue tax rates close to the $\$ 30$ or $\$ 60$ legal limit. The district can use the CAB money to make needed improvements in the near term, but not have to make debt service payments that would push the bond tax rate over the $\$ 30$ or $\$ 60$ limit until many years into the future.

Another advantage of CABs is they provide the school district with more funds to take advantage of state matching opportunities and federal subsidy opportunities. California has recently matched local school district construction costs at a 50/50 ratio for new construction and a 60/40 ratio for school modernization, although actual matching levels have been lower due to lower construction valuation levels assumptions at the state level. These funds have come from state school construction bond measures passed by the voters of California. Once the funds from the state bonds are exhausted, then the state is no longer in a position to match local districts. This is what has happened over the past few years.

The federal government also approved Build America Bonds (BAB) and Qualified School Construction Bonds (QSCB) as part of the 2009 American Recovery and Reinvestment Act. These programs have since closed, with no additional applications being accepted. The local school district employing BAB bonds receives a subsidy from the federal government for a portion of the interest on the bonds for a fixed period of time. Similarly, with QSCB bonds, the local school district receives a near $100 \%$ subsidy from the federal government for the interest paid on the bonds for a limited period of time. The net effect to the local school district is they can stretch their bond money further while relying on these matching funds from the state and interest subsidies from the federal government.

The disadvantages of CABs have been well documented in many media reports. The cost of deferring the payment of principal and interest well into the future results in a higher debt ratio of interest to principal; for example up to 20:1for individual bonds in an extreme example. The debt ratio of interest to principal for all bonds per AB 182 is now capped at $4: 1$ for each bond series from a bond election. Another well-discussed disadvantage of CABs to the future taxpayer is their long term, up to 40 years, effectively transfers most of the obligation to repay the CAB to future generations of taxpayers. AB 182 limits the term of a CAB to 25 years.

## An Overview of Orange County School District Bonded Debt

An Orange County School District School Bond Financing Analysis may be found in Table 1. The school districts are grouped into Elementary, High School and Unified categories. The 2013-2014 assessed values (AVs) for each school district are listed in the second column of the table. These are the most recent AVs available from the Orange County Assessor. The next column lists the Bonding Rate Limit. As mentioned previously, elementary and high school districts are limited to a bonding limit of $1.25 \%$ of AVs in the school district; unified school districts are limited to $2.5 \%$. The Bonding Limit column is calculated by multiplying the 20132014 Assessed Values column by the Maximum Bonding Percentage column. The 2013-2014 Outstanding Bonding Indebtedness column data was obtained from the Annual Financial Report for each of the school districts. The Percentage Allowable Bonding column is calculated by dividing the 2013-2014 Outstanding Bonding Indebtedness column by the Bonding Limit column. This column is expressed as a percentage.

In viewing Table 1, the major issue is that that Savanna Elementary School District is at $182.8 \%$ of their bonding limit. They have exceeded the legal limit of $1.25 \%$ of AVs by a large margin. According to California law, an elementary or high school district is limited to bonding indebtedness of no more than $1.25 \%$ of the value of the assessed values in the school district.

After further investigation, the Grand Jury determined that Savanna did receive a waiver from the California State Board of Education in July 2012 to exceed the bonding indebtedness legal limit of $1.25 \% .^{5}$ This will be more thoroughly discussed in the Analysis portion of this study. Also apparent in Table 1 is that Anaheim City, Cypress and Westminster Elementary School

[^3]Districts have bonded indebtedness well over $50 \%$ of the legal limit of $1.25 \%$. After reviewing these three districts and the Savanna district, the Grand Jury decided to exclude Anaheim City Elementary School District and focus on the remaining three elementary school districts:

1. Savanna
2. Cypress
3. Westminster

Anaheim City Elementary School District was excluded from further study because it became apparent very quickly that they did not have the same issue as the other three districts have with their future tax rates potentially exceeding the legal limit of $\$ 30$ per $\$ 100,000$ of AV .

Table 1

| Orange County School District School Bond Financing Analysis |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Elementary Districts | $\begin{gathered} \text { 2013-2014 } \\ \text { Assessed Values } \end{gathered}$ | Bond Rate Limit | Bonding Limit | 2013-2014 Outstanding Bonding Indebtness | Percentage <br> Allowable <br> Bonding |
| Anaheim City | \$ 20,537,299,645 | 1.25\% | \$ 256,716,246 | \$ 171,046,239 | 66.6\% |
| Buena Park | \$ 5,541,848,055 | 1.25\% | \$ 69,273,101 | \$ 12,714,418 | 18.4\% |
| Centralia | \$ 4,157,856,930 | 1.25\% | \$ 51,973,212 | \$ 15,038,915 | 28.9\% |
| Cypress | \$ 5,268,689,615 | 1.25\% | \$ 65,858,620 | \$ 40,518,130 | 61.5\% |
| Fountain Valley | \$ 6,601,757,498 | 1.25\% | \$ 82,521,969 |  | 0.0\% |
| Fullerton | \$ 13,140,365,106 | 1.25\% | \$ 164,254,564 | \$ 37,805,458 | 23.0\% |
| Huntington Beach City | \$ 15,622,257,160 | 1.25\% | \$ 195,278,215 | \$ 26,670,075 | 13.7\% |
| La Habra City | \$ 4,651,050,053 | 1.25\% | \$ 58,138,126 | \$ 18,514,265 | 31.8\% |
| Magnolia | \$ 3,141,651,072 | 1.25\% | \$ 39,270,638 | \$ 18,003,305 | 45.8\% |
| Ocean View | \$ 12,309,661,279 | 1.25\% | \$ 153,870,766 |  | 0.0\% |
| Savanna | \$ 1,829,452,922 | 1.25\% | \$ 22,868,162 | \$ 41,808,730 | 182.8\% |
| Westminster | \$ 7,584,638,808 | 1.25\% | \$ 94,807,985 | \$ 78,391,352 | 82.7\% |
| High School Districts |  |  |  |  |  |
| Anaheim Union | \$ 34,934,950,184 | 1.25\% | \$ 436,686,877 | \$ 109,472,743 | 25.1\% |
| Fullerton Joint Union | \$ 24,554,665,530 | 1.25\% | \$ 306,933,319 | \$ 60,299,736 | 19.6\% |
| Huntington Beach Union | \$ 42,118,314,745 | 1.25\% | \$ 526,478,934 | \$ 222,793,895 | 42.3\% |
| Unified Districts |  |  |  |  |  |
| Brea Olinda | \$ 7,280,360,670 | 2.50\% | \$ 182,009,017 | \$ 20,334,028 | 11.2\% |
| Capistrano | \$ 67,392,524,588 | 2.50\% | \$ 1,684,813,115 | \$ 50,118,041 | 3.0\% |
| Garden Grove | \$ 20,429,829,319 | 2.50\% | \$ 510,745,733 | \$ 127,641,651 | 25.0\% |
| Irvine | \$ 24,370,885,513 | 2.50\% | \$ 609,272,138 |  | 0.0\% |
| Laguna Beach | \$ 15,276,496,280 | 2.50\% | \$ 381,912,407 | \$ 29,510,000 | 7.7\% |
| Los Alamitos | \$ 8,098,978,819 | 2.50\% | \$ 202,474,470 | \$ 69,808,184 | 34.5\% |
| Newport-Mesa | \$ 52,604,383,862 | 2.50\% | \$1,315,109,597 | \$ 269,022,367 | 20.5\% |
| Orange | \$ 28,645,436,055 | 2.50\% | \$ 716,135,901 |  | 0.0\% |
| Placentia-Yorba Linda | \$ 23,131,873,978 | 2.50\% | \$ 578,296,849 | \$ 268,817,022 | 46.5\% |
| Saddleback Valley | \$ 30,550,793,673 | 2.50\% | \$ 763,769,842 | \$ 121,645,000 | 15.9\% |
| Santa Ana | \$ 25,461,744,469 | 2.50\% | \$ 636,543,612 | \$ 329,329,107 | 51.7\% |
| Tustin | \$ 20,091,547,528 | 2.50\% | \$ 502,288,688 | \$ 162,786,785 | 32.4\% |

Source: Annual Report for each School District

## METHOD OF STUDY

This topic required extensive research. Numerous newspaper articles were reviewed from The Orange County Register, Los Angeles Times and San Diego Union-Tribune. An extensive Internet search was conducted to learn about the mechanics of bond financing and the related mathematics.

Three major spreadsheets were assembled in the course of researching this report. The first spreadsheet, similar but more comprehensive than Table 1, was assembled to assess the overall debt levels for all Orange County school districts. This spreadsheet included the same bonded indebtedness calculations found in Table 1, but it also contained other debt information for Certificates of Participation, Qualified Zone Academy Bonds, Bond Anticipation Notes, Build America Bonds and Qualified School Construction Bonds. After researching all of these other types of debt, the Grand Jury made the decision to focus this report primarily on the issue of bonded indebtedness and the related debt service issues and potentially higher taxes that may result from this bonded indebtedness. Information for this first spreadsheet was obtained from the Orange County Department of Education ${ }^{6}$ and Electronic Municipal Market Access (EMMA). The EMMA website was used to research the Official Statements (legal document describing the bond issue for investors) for the individual bond issues. Table 2 was also derived from the first spreadsheet.

The second spreadsheet was put together to determine the average increase in assessed values in each school district over the last five, ten and twenty years. The data for the historical assessed values were obtained from the Orange County Assessor's office. A compounded annual growth rate (CAGR) as well as an average growth rate (average of the annual growth rates) was calculated for a five, ten and twenty year period. In all cases the CAGR and the average growth rates were very similar. Tables 3,5 and 7 were derived from the second spreadsheet.

Debt service was the focus of the third spreadsheet. The master spreadsheet is made up of separate worksheets for each of the school districts. Each worksheet is built around projecting forward the tax rate based on different AV growth rate assumptions. Tables 4, 6 and 8 were derived from the third spreadsheet.

[^4]The Grand Jury also interviewed senior school district officials from the following school districts:

1. Santa Ana Unified School District
2. Savanna Elementary School District
3. Representative for Independent Financial Firm for Savanna Elementary School District
4. Cypress Elementary School District
5. Representative for Independent Financial Firm for Cypress Elementary School District
6. Westminster Elementary School District
7. Representative for Independent Financial Firm for Westminster Elementary School District.

In addition, the Grand Jury also interviewed several top officials from the Orange County Department of Education and a financial advisor not affiliated with the Savanna, Cypress and Westminster Elementary School Districts.

## ANALYSIS

## Impact of Assessed Values

It costs about the same amount of money, except perhaps the cost of the land, to build a school in Newport Beach as it does to build a school in Westminster. However, the assessed values in Newport Beach are obviously much higher, which gives the Newport Mesa Unified School District much more funding per pupil for school construction and renovation. As discussed earlier, there are two metrics for school bonds that all California school districts must conform to:

1. Total bonded indebtedness cannot exceed $1.25 \%$ of assessed values in the district for elementary and high school districts and $2.5 \%$ of assessed values for unified school districts.
2. Annual bond debt service may not exceed $\$ 30$ per $\$ 100,000$ of assessed values in the district for elementary and high school districts and $\$ 60$ per $\$ 100,000$ of assessed values for unified school districts.

Note that the limiting factor for both of these metrics is assessed values. Table 2 clearly shows the effect of assessed values for the different school districts in Orange County. For each school district, the Assessed Values for 2013-2014 is divided by the Average Daily Attendance (ADA) to yield the 2013-2014 Assessed Value per Student (ADA).

As can be seen at the bottom of Table 2 on page 13, the overall average for 2013-2014 Assessed Values per Student (ADA) for all school districts in Orange County is approximately $\$ 1,100,000$. Laguna Beach Unified has the highest Assessed Value per Student at $\$ 5,285,985$. At the other end of the scale, Garden Grove Unified has the lowest Assessed Value per Student at \$443,346.

What does this mean in terms of school bond financing? It means that Laguna Beach Unified, because of its much higher assessed values, has a bonding capacity of over ten times that of Garden Grove Unified on a per student basis. It also means that Laguna Beach Unified can support a bond annual debt service of over ten times than what Garden Grove Unified can support on a per student basis. The net result is school districts with below average assessed values per student relative to the county as a whole are at a distinct disadvantage in terms of their ability to finance school construction through bond issues.

The main emphasis of this report is to examine the debt service issues and potential tax increases in three northern Orange County Elementary School Districts:

1. Savanna
2. Westminster
3. Cypress

Savanna and Westminster Elementary School Districts have Assessed Values per Student significantly below the Orange County average of approximately $\$ 1,100,000$ at $\$ 784,500$ and $\$ 808,425$ respectively. Cypress, on the other hand, has an Assessed Value per Student of $\$ 1,397,901$, which is above the Orange County approximate average of $\$ 1,100,000$.

Table 2

| Assessed Value per Student by School District |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Elementary Districts | $\begin{gathered} 2013-2014 \\ \text { Assessed Values } \end{gathered}$ | 2012-2013 Average Daily Attendance | 2013-2014 <br> Assessed <br> Values per <br> Student (ADA)* |  |
| Anaheim City | \$ 20,537,299,645 | 18,415 | \$ | 1,115,248 |
| Buena Park | \$ 5,541,848,055 | 5,157 | \$ | 1,074,626 |
| Centralia | \$ $4,157,856,930$ | 4,339 | \$ | 958,252 |
| Cypress | \$ 5,268,689,615 | 3,769 | \$ | 1,397,901 |
| Fountain Valley | \$ 6,601,757,498 | 6,150 | \$ | 1,073,457 |
| Fullerton | \$ 13,140,365,106 | 13,460 | \$ | 976,253 |
| Huntington Beach City | \$ 15,622,257,160 | 6,877 | \$ | 2,271,667 |
| La Habra City | \$ 4,651,050,053 | 5,059 | \$ | 919,362 |
| Magnolia | \$ 3,141,651,072 | 6,125 | \$ | 512,923 |
| Ocean View | \$ 12,309,661,279 | 9,187 | \$ | 1,339,900 |
| Savanna | \$ 1,829,452,922 | 2,332 | \$ | 784,500 |
| Westminster | \$ 7,584,638,808 | 9,382 | \$ | 808,425 |
| High School Districts |  |  |  |  |
| Anaheim Union | \$ 34,934,950,184 | 30,535 | \$ | 1,144,095 |
| Fullerton Joint Union | \$ 24,554,665,530 | 13,941 | \$ | 1,761,327 |
| Huntington Beach Union | \$ 42,118,314,745 | 15,660 | \$ | 2,689,548 |
| Unified Districts |  |  |  |  |
| Brea Olinda | \$ 7,280,360,670 | 5,733 | \$ | 1,269,904 |
| Capistrano | \$ 67,392,524,588 | 51,678 | \$ | 1,304,085 |
| Garden Grove | \$ 20,429,829,319 | 46,081 | \$ | 443,346 |
| Irvine | \$ 24,370,885,513 | 28,313 | \$ | 860,767 |
| Laguna Beach | \$ 15,276,496,280 | 2,890 | \$ | 5,285,985 |
| Los Alamitos | \$ 8,098,978,819 | 9,586 | \$ | 844,876 |
| Newport-Mesa | \$ 52,604,383,862 | 20,951 | \$ | 2,510,829 |
| Orange | \$ 28,645,436,055 | 28,700 | \$ | 998,099 |
| Placentia-Yorba Linda | \$ 23,131,873,978 | 24,817 | \$ | 932,098 |
| Saddleback Valley | \$ 30,550,793,673 | 29,189 | \$ | 1,046,654 |
| Santa Ana | \$ 25,461,744,469 | 55,398 | \$ | 459,615 |
| Tustin | \$ 20,091,547,528 | 23,139 | \$ | 868,298 |
|  |  | 476,863 | \$ | 1,100,000* |

Source: Orange County Department of Education (ADA) and Annual Reports for all of the school districts
*This average is approximate because there is some double-counting of the AV's in the High School Districts. Fullerton Joint Union High School District is partially located in LA County, which also affects the AV's shown for the district.

## Savanna Elementary School District

Savanna Elementary School District is the smallest school district in Orange County, with an Average Daily Attendance (ADA) of 2,332 students. The District is located in parts of the cities of Anaheim, Buena Park, Cypress and Stanton and consists of four elementary schools. Prior to 2008, the district had never asked the voters to approve a bond issue. All of the schools were over 50 years old and very little had been done over the years to renovate the schools. The voters approved Measure N in 2008, authorizing the district to borrow $\$ 24,935,000$. The district has issued two series of bonds against the Measure N authorization. The 2008A bonds were issued in May 2009 for an aggregate principal amount of $\$ 7,499,721$. The 2008B bonds were issued in February 2012 for an aggregate principal amount of $\$ 12,110,064$.

This bond issue was originally intended to cover the renovation of all four elementary schools. According to senior management of the district, the district applied for state matching funds. These matching funds were required to supplement the bond money to complete the renovation of the four schools. Unfortunately for the district, the state matching funds dried up when the state's economic crisis worsened, so the district did not receive the planned matching funds. As a result, the district found itself short of the funds required to complete the renovation of the third and fourth schools. Further complicating this situation was one of the two remaining unrenovated schools' population was largely minority. The district's senior management was very concerned about creating the perception they were less concerned about renovating that school.

The district made the decision to ask the voters to approve a second bond authorization and preemptively applied to the California State Board of Education for a waiver for bonded indebtedness. This second bond issue would put the district well over the legal limit of $1.25 \%$ of bonded indebtedness relative to total assessed property values in the district. Declining property values in the district also contributed to the district exceeding the legal limit of $1.25 \%$ for bonded indebtedness. The California State Board of Education approved the waiver for Savanna's bonded indebtedness in July 2012.

The voters approved a second bond issue, Measure G, in June 2012 authorizing the district to borrow up to $\$ 28,750,000$ to complete the renovations for the two remaining schools and other specified projects. The district then issued 2012 Series A Bonds in August 2012 for an aggregate amount of $\$ 22,608,945$. The district issued a combination of Current Interest Bonds (CIBs), Capital Appreciation Bonds (CABs) and Convertible Capital Appreciation Bonds (CCABs. The CABs maturing in the years 2033 through 2037 have debt ratios ranging from 11.48:1 in the year 2033 to 18.29:1 in 2037.

The Grand Jury toured some of the schools that were renovated using the funds raised in the bond measures. The Grand Jury was very impressed with the work that had been done to bring the schools up to a $21^{\text {st }}$ Century standard. The district is rightfully proud of the work that has been done and is continuing to be done to ensure that their schools meet or exceed all of the modern educational requirements.

As discussed previously, the issues with having high debt ratios with CABs have been widely studied over the last several years. This report will now explore the implications for repaying the debt on these bonds and the potential for future tax increases beyond what was promised to the voters when these two bond issues were approved.

Please refer to Table 3 to see the 20-year history for the growth of Assessed Values (AV) in the Savanna Elementary School District.

Table 3

| Savanna Elementary School District Historical Assessed <br> Values |  |  |
| :---: | :---: | :---: |
| Year | Total Assessed Values Assessor Data | \% Growth |
| 7/1/2013 | \$1,829,452,922 | 4.96\% |
| 7/1/2012 | \$1,743,072,375 | 1.10\% |
| 7/1/2011 | \$1 | \% |
| 7/1/2010 | \$1,722,157,560 | 0.45\% |
| 7/1/2009 | \$1,714,453,828 | -6.66\% |
| 7/1/2008 | \$1,836,830,506 | 1.78\% |
| 7/1/2007 | \$1,804,778,797 | 8.68\% |
| 7/1/2006 | \$1,660,616,201 | 11.31\% |
| 7/1/2005 | \$1,491,820,584 | 11.02\% |
| 7/1/200 | \$1,343,684,130 | 10.56\% |
| 7/1/2003 | \$1,215,313,174 | 7.19\% |
| 7/1/2002 | \$1,133,796,292 | 7.36\% |
| 7/1/2001 | \$1,056,068,804 | 7.55\% |
| 7/1/2000 | \$981,963,388 | 8.98\% |
| 7/1/1999 | \$901,049,545 | 3.22\% |
| 7/1/1998 | \$872,898,755 | 3.59\% |
| 7/1/1997 | \$842,677,907 | 0.59\% |
| 7/1/1996 | \$837,773,304 | -1.16\% |
| 7/1/1995 | \$847,605,403 | -3.52\% |
| 7/1/1994 | \$878,528,693 | -0.98\% |
| 7/1/1993 | \$887,201,361 |  |
|  | 20 Year Average | 3.81\% |
|  | 10 Year Average | 4.33\% |
|  | 5 Year Average | -0.01\% |

Source: Orange County Assessor

|  | 20 Years | 10 Years | 5 years |
| :--- | ---: | ---: | ---: |
| Compounded Annual <br> Growth Rate (CAGR) | $3.68 \%$ | $4.17 \%$ | $-0.08 \%$ |

Note the Compounded Annual Growth Rates (CAGR) for AV in the Savanna Elementary School District for the last 20, 10 and 5 years have been $3.68 \%, 4.17 \%$ and $-0.08 \%$ respectively. This history of AV growth is important to consider when projecting forward into the future and making assumptions about what the future growth in AV will be. Please refer to Table 4 to review the Savanna Elementary School District Debt Service Analysis.

Table 4

| Savanna Elementary School District Debt Service Analysis |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Total Debt Service 2008 Bonds | Assessed Values @ 4\% Annual Growth | Assessed <br> Values @7\% <br> Annual Growth | 2008 Bonds <br> Tax Rate per \$100k of AV @ 4\% AV Growth | 2008 Bonds <br> Tax Rate per \$100k of AV @ 7\% AV Growth | Total Debt <br> Service 2012 <br> Bonds | 2012 Bonds <br> Tax Rate per $\$ 100 \mathrm{k}$ of AV @ 4\% AV Growth | 2012 Bonds <br> Tax Rate per \$100k of AV <br> @ 7\% AV Growth |
| 2013 |  | \$1,829,452,922 | \$1,829,452,922 |  |  |  |  |  |
| 2014 | \$556,163 | \$1,902,631,039 | \$1,957,514,627 | \$29.23 | \$28.41 | \$530,969 | \$27.91 | \$27.12 |
| 2015 | \$584,363 | \$1,978,736,280 | \$2,094,540,650 | \$29.53 | \$27.90 | \$560,969 | \$28.35 | \$26.78 |
| 2016 | \$636,663 | \$2,057,885,732 | \$2,241,158,496 | \$30.94 | \$28.41 | \$605,369 | \$29.42 | \$27.01 |
| 2017 | \$697,813 | \$2,140,201,161 | \$2,398,039,591 | \$32.61 | \$29.10 | \$673,119 | \$31.45 | \$28.07 |
| 2018 | \$762,751 | \$2,225,809,207 | \$2,565,902,362 | \$34.27 | \$29.73 | \$717,319 | \$32.23 | \$27.96 |
| 2019 | \$826,351 | \$2,314,841,576 | \$2,745,515,527 | \$35.70 | \$30.10 | \$764,519 | \$33.03 | \$27.85 |
| 2020 | \$892,951 | \$2,407,435,239 | \$2,937,701,614 | \$37.09 | \$30.40 | \$814,519 | \$33.83 | \$27.73 |
| 2021 | \$962,351 | \$2,503,732,648 | \$3,143,340,727 | \$38.44 | \$30.62 | \$864,019 | \$34.51 | \$27.49 |
| 2022 | \$1,029,151 | \$2,603,881,954 | \$3,363,374,578 | \$39.52 | \$30.60 | \$915,269 | \$35.15 | \$27.21 |
| 2023 | \$1,092,363 | \$2,708,037,232 | \$3,598,810,799 | \$40.34 | \$30.35 | \$968,019 | \$35.75 | \$26.90 |
| 2024 | \$1,160,363 | \$2,816,358,722 | \$3,850,727,555 | \$41.20 | \$30.13 | \$1,027,419 | \$36.48 | \$26.68 |
| 2025 | \$1,231,113 | \$2,929,013,070 | \$4,120,278,483 | \$42.03 | \$29.88 | \$1,089,860 | \$37.21 | \$26.45 |
| 2026 | \$1,303,863 | \$3,046,173,593 | \$4,408,697,977 | \$42.80 | \$29.57 | \$1,154,860 | \$37.91 | \$26.20 |
| 2027 | \$1,381,813 | \$3,168,020,537 | \$4,717,306,836 | \$43.62 | \$29.29 | \$1,219,860 | \$38.51 | \$25.86 |
| 2028 | \$1,464,975 | \$3,294,741,359 | \$5,047,518,314 | \$44.46 | \$29.02 | \$1,294,860 | \$39.30 | \$25.65 |
| 2029 | \$1,552,513 | \$3,426,531,013 | \$5,400,844,596 | \$45.31 | \$28.75 | \$1,368,485 | \$39.94 | \$25.34 |
| 2030 | \$1,647,738 | \$3,563,592,253 | \$5,778,903,718 | \$46.24 | \$28.51 | \$1,448,485 | \$40.65 | \$25.07 |
| 2031 | \$1,743,875 | \$3,706,135,943 | \$6,183,426,978 | \$47.05 | \$28.20 | \$1,535,723 | \$41.44 | \$24.84 |
| 2032 | \$1,844,475 | \$3,854,381,381 | \$6,616,266,866 | \$47.85 | \$27.88 | \$1,625,723 | \$42.18 | \$24.57 |
| 2033 | \$1,949,475 | \$4,008,556,636 | \$7,079,405,547 | \$48.63 | \$27.54 | \$1,725,035 | \$43.03 | \$24.37 |
| 2034 | \$2,060,000 | \$4,168,898,902 | \$7,574,963,935 | \$49.41 | \$27.19 | \$1,825,035 | \$43.78 | \$24.09 |
| 2035 | \$2,179,425 | \$4,335,654,858 | \$8,105,211,411 | \$50.27 | \$26.89 | \$1,935,035 | \$44.63 | \$23.87 |
| 2036 | \$2,304,425 | \$4,509,081,052 | \$8,672,576,210 | \$51.11 | \$26.57 | \$2,050,035 | \$45.46 | \$23.64 |
| 2037 | \$2,439,425 | \$4,689,444,294 | \$9,279,656,544 | \$52.02 | \$26.29 | \$2,170,035 | \$46.27 | \$23.38 |
| 2038 | \$2,569,425 | \$4,877,022,066 | \$9,929,232,502 | \$52.68 | \$25.88 | \$2,295,035 | \$47.06 | \$23.11 |
| 2039 | \$2,714,425 | \$5,072,102,949 | \$10,624,278,778 | \$53.52 | \$25.55 | \$2,429,835 | \$47.91 | \$22.87 |
| 2040 | \$2,864,425 | \$5,274,987,067 | \$11,367,978,292 | \$54.30 | \$25.20 | \$2,577,035 | \$48.85 | \$22.67 |
| 2041 | \$3,019,425 | \$5,485,986,549 | \$12,163,736,772 | \$55.04 | \$24.82 | \$2,725,835 | \$49.69 | \$22.41 |
| 2042 | \$3,184,425 | \$5,705,426,011 | \$13,015,198,347 | \$55.81 | \$24.47 | \$2,890,835 | \$50.67 | \$22.21 |
| 2043 | \$3,359,425 | \$5,933,643,052 | \$13,926,262,231 | \$56.62 | \$24.12 | \$3,061,532 | \$51.60 | \$21.98 |
| 2044 | \$3,547,563 | \$6,170,988,774 | \$14,901,100,587 | \$57.49 | \$23.81 | \$3,241,035 | \$52.52 | \$21.75 |
| 2045 | \$3,741,463 | \$6,417,828,325 | \$15,944,177,628 | \$58.30 | \$23.47 | \$3,431,035 | \$53.46 | \$21.52 |
| 2046 | \$3,949,438 | \$6,674,541,458 | \$17,060,270,062 | \$59.17 | \$23.15 | \$3,632,160 | \$54.42 | \$21.29 |
| 2047 | \$4,164,125 | \$6,941,523,116 | \$18,254,488,966 | \$59.99 | \$22.81 | \$3,847,480 | \$55.43 | \$21.08 |
| 2048 | \$4,393,500 | \$7,219,184,041 | \$19,532,303,194 | \$60.86 | \$22.49 | \$4,077,251 | \$56.48 | \$20.87 |
| 2049 | \$4,634,863 | \$7,507,951,403 | \$20,899,564,418 | \$61.73 | \$22.18 | \$4,317,209 | \$57.50 | \$20.66 |
| 2050 | \$4,890,513 | \$7,808,269,459 | \$22,362,533,927 | \$62.63 | \$21.87 | \$4,571,230 | \$58.54 | \$20.44 |
| 2051 | \$5,157,413 | \$8,120,600,237 | \$23,927,911,302 | \$63.51 | \$21.55 | \$4,840,200 | \$59.60 | \$20.23 |
| 2052 | \$5,157,413 | \$8,445,424,247 | \$25,602,865,093 | \$61.07 | \$20.14 | \$5,130,000 | \$60.74 | \$20.04 |

Source: Official Statement for Savanna Elementary School District General Obligation Bonds, 2012 Election, Series A dated August 16, 2012

The first column in Table 4 shows the year, the second column provides the annual debt service for the 2008 Bonds and the third column shows the Savanna AV projected into the future assuming a $4 \%$ annual growth rate, which is similar to the 20 year historical average for assessed values growth shown in Table 3. The fourth column shows the Savanna AV projected into the future assuming a $7 \%$ annual growth rate and the fifth and sixth columns show the 2008 Bonds calculated tax rate with AV growth of $4 \%$ and $7 \%$ respectively. Columns $7-9$ show the debt service for the 2012 Bonds and the calculated tax rates for AV growth of $4 \%$ and $7 \%$ respectively.

As mentioned previously, the average AV growth over the last 20 years for the Savanna Elementary School District is around 4\%. Assuming this is the average AV growth going forward, Table 4 very clearly shows the dramatic projected increase in tax rates in future years. For the 2008 Bonds, the tax rate increases to over $\$ 40$ per $\$ 100,000$ of AV in 2023, over $\$ 50$ in 2035 and over $\$ 60$ in 2048. When the voters approved this bond issue, the district projected the tax rate would never exceed the legal maximum rate of $\$ 30$ per $\$ 100,000$ of AV. The district also promised the State Board of Education when they applied for the waiver for bonded indebtedness that they would not exceed the legal tax rate of $\$ 30$ per $\$ 100,000$ of AV.

There is a similar trend for the 2012 Bonds future tax rates based on AV growth going forward averaging $4 \%$. For the 2012 Bonds, the tax rate increases to over $\$ 40$ per $\$ 100,000$ of AV in 2030, over $\$ 50$ in 2042 and over $\$ 60$ in 2052. The district projected this tax rate would also never exceed the legal maximum rate of $\$ 30$ per $\$ 100,000$ of AV.

Table 4 also shows that if AV growth averages $7 \%$ then the problem goes away; the tax rate for both bonds never exceeds the legal maximum rate of $\$ 30$ per $\$ 100,000$ of AV.

How likely is the $7 \% \mathrm{AV}$ growth scenario?
The district and their financial advisory firm argue that this is the much more likely scenario. The financial advisor presented their historical data for AV that was used to prepare the tax rate assumptions for both the 2008 and 2012 bond issues. Their data, which is based on 35 years of historical AV in the district, shows an average AV growth of over $6.5 \%$ during that 35 year period.

The Grand Jury sees a flaw with this methodology and data. The early years of this 35 year historical AV growth data include a considerable amount of original development that is purely incremental to the AV base, (i.e. the AV growth rate is inflated because new development adds to the AV but does not represent year over year growth of the same properties). The district is almost entirely built out today; almost all AV growth must come from year over year growth for largely the same property base. Normal property sales that result in re-assessments of properties will also add to the AV base going forward. The district and their financial advisor make the point that in-fill and higher density developments are taking place. It is difficult to see how the
district can average 7\% growth over the next 40 years given the history of AV growth in the district over the last 20 years.

To the degree that the AV growth falls short of $7 \%$ over the next 40 years, the district's taxpayers are on the hook to pay the taxes in excess of the legal limit of $\$ 30$ per $\$ 100,000$ of AV.

So what does this mean to the typical homeowner in the district? Assume the district's AVs will continue to grow at the historical annual rate of $4 \%$ per year and the homeowner's home AV grows at the Proposition 13 mandated annual rate of $2 \%$ per year. The district taxpayer will pay an additional $\$ 2,025$ of taxes for every $\$ 100,000$ of AV for his house between now and when the last bonds mature in 2052, or an average of $\$ 50.63$ per year for every $\$ 100,000$ of AV. A homeowner with a house assessed at $\$ 500,000$ today will pay an additional $\$ 10,127$ in taxes between now and when the bonds mature. Note that no discounted cash flow or present value techniques were used in these calculations to avoid additional complexity. Please see Appendix A at the back of the report for the detailed calculations.

When a school district issues a bond, the interest rates for the bond issue are based on market conditions and the credit worthiness of the particular school district. Once the bond issue goes to the market, the interest rates are established and the debt payment schedules for the terms of the bonds can be calculated. The school district and its financial advisors are required to certify for each bond issue that, based on their good faith estimates for AV growth, the tax rate will be less than the legal maximum of either $\$ 30$ per $\$ 100,000$ of AV for Elementary and High School Districts or $\$ 60$ per $\$ 100,000$ for Unified School Districts over the term of the bonds.

Clearly there is room for differences of opinion in what constitutes a good faith estimate. However, one reasonable interpretation of a good faith estimate is that it has equal chances of being either too high or too low. By that standard, the district and their financial advisor's estimate of the district's AV growth averaging close to $7 \%$ growth over the next 40 years appears to be unreasonable to the Grand Jury.

## Cypress Elementary School District

Cypress Elementary School District is another relatively small school district, third smallest in terms of average daily attendance (ADA) in Orange County, with 3,769 students and six elementary schools. Similar to Savanna, all of the schools are over 50 years old.

The voters approved a bond measure authorizing the district to borrow up to $\$ 53,600,000$ for school renovations in November 2008. The district issued the 2008 Series A Bonds in the aggregate amount of $\$ 16,999,051.95$ in May 2009. Close to $90 \%$ of these bonds were CIBs. The district also issued Bond Anticipation Notes in the aggregate amount of \$6,998,642 in May 2009. A Bond Anticipation Note is essentially a promissory note for a term of no longer than five years that promises to pay the proceeds of the note with a future bond issue that has already been approved by the voters.

The district then issued 2008 Series B-1 and B-2 bonds in April 2011 in the aggregate amounts of $\$ 20,139,078$ and $\$ 4,535,000$ respectively. The Series B-2 Bond was a Qualified School Construction Bond (QSCB). The Series B-1 Bonds were mostly CABs but did include some CIBs as well. The longer maturity CABs in the B-2 bonds had debt ratios approaching 20:1.

In late 2012, similar to Savanna district, the Cypress district found itself in a situation in which anticipated state matching funds required to complete all of the planned renovations were not forthcoming from the state. The district only received or got commitments to receive approximately $\$ 9$ million in matching funds from the state. This left a significant shortfall that had to be made up in some manner to complete the planned school renovations.

The district considered a number of alternatives to close this funding gap. They also were open to deferring some of the school renovations to reduce the overall cost. The district had funds of approximately $\$ 6$ million from bonds that had been issued but not yet spent. They also considered, but ultimately rejected issuing approximately $\$ 4$ million of Series C bonds, which would have been entirely made up of CABs. The debt ratio on the CABs would have been over 10:1 and the bonds would have had terms up to 40 years. The district's senior management was rightfully concerned that they would get a lot of negative publicity if they chose to issue the Series C CABs.

Ultimately the solution the district chose to fill most of the funding gap left from the lack of state matching funds was to issue Certificates of Participation (COP) for $\$ 7,365,000$ in February 2013. A non-technical definition of a COP is that it is a financial instrument, similar to a bond, that entitles the purchaser to a pro-rata share of a specific pledged revenue stream, usually lease payments, by the issuer (Cypress Elementary School District) that are typically subject to annual appropriation. In this case, the district transferred a school (Juliet Morris Elementary School) and the school grounds to the Cypress School District Public Financing Corporation. The district then entered into a lease with Cypress School District Public Financing Corporation to use the Juliet Morris Elementary School for normal educational activities. The lease payments that the district will make will flow to a financial trustee, who will then redistribute those payments to the owners of the Certificates of Participation.

The Grand Jury found that this type of a lease-leaseback arrangement is a common technique employed by school districts. There is nothing unusual about this particular transaction.

The district specified that the COP's be callable in five years, not the ten years that is a common practice. The district paid a slightly higher interest rate, but that was an acceptable trade off to be able to pay off the COP's early.

The Cypress district is contractually entitled to redevelopment revenue from four redevelopment agencies (RDA's): Buena Park RDA, La Palma RDA, Orange County RDA and Cypress RDA. These contracts were in place before the RDA's were eliminated in 2011. As a result, this RDA revenue from the four cities was not eliminated due to the termination of all RDA's. The district
will receive approximately $\$ 1$ million a year of RDA revenue through 2018. The RDA revenues fall off to approximately $\$ 725,000$ a year through 2023 and then fall off again to approximately $\$ 150,000$ per year until they terminate in 2035. The district's strategy is to utilize these known RDA revenues to accelerate the payment of all of the COP's by 2018. The COP's are scheduled to mature over the years 2017 - 2028.

The Grand Jury applauds Cypress Elementary School District for trying to fully utilize all available facilities revenue sources rather than issuing very expensive CABs. The district has the good fortune to be located in an area where they could rely on the RDA revenue to essentially pay off the COP's.

The Grand Jury was also very impressed with the renovations that have been completed by the Cypress district. The Grand Jury toured several of the newly renovated schools as well as part of an un-renovated school. There was very visible progress that has been accomplished. The district has every reason to be proud of their new facilities.

Unfortunately, the district has issues similar to Savanna with its 2008 bonds and related debt service. Again, the problem lies with what appears to be overly optimistic projections on the future growth of the district's AVs. Please see Table 5 below.

Table 5

| Cypress Elementary School <br> District Historical Assessed <br> Values |  |  |
| :---: | :---: | :---: |
| Year | Total Assessed <br> Values Assessor <br> Data | \% <br> Change |
| $7 / 1 / 2013$ | $\$ 5,268,689,615$ | $3.17 \%$ |
| $7 / 1 / 2012$ | $\$ 5,106,668,147$ | $2.03 \%$ |
| $7 / 1 / 2011$ | $\$ 5,004,901,750$ | $0.88 \%$ |
| $7 / 1 / 2010$ | $\$ 4,961,208,446$ | $-0.12 \%$ |
| $7 / 1 / 2009$ | $\$ 4,967,060,242$ | $-1.36 \%$ |
| $7 / 1 / 2008$ | $\$ 5,035,493,741$ | $3.11 \%$ |
| $7 / 1 / 2007$ | $\$ 4,883,384,943$ | $7.28 \%$ |
| $7 / 1 / 2006$ | $\$ 4,552,080,723$ | $8.95 \%$ |
| $7 / 1 / 2005$ | $\$ 4,178,141,871$ | $7.91 \%$ |
| $7 / 1 / 2004$ | $\$ 3,871,751,393$ | $7.97 \%$ |
| $7 / 1 / 2003$ | $\$ 3,585,805,544$ | $6.32 \%$ |
| $7 / 1 / 2002$ | $\$ 3,372,732,800$ | $6.68 \%$ |
| $7 / 1 / 2001$ | $\$ 3,161,587,814$ | $5.69 \%$ |
| $7 / 1 / 2000$ | $\$ 2,991,406,549$ | $8.41 \%$ |
| $7 / 1 / 1999$ | $\$ 2,759,378,829$ | $4.07 \%$ |
| $7 / 1 / 1998$ | $\$ 2,651,426,519$ | $6.05 \%$ |
| $7 / 1 / 1997$ | $\$ 2,500,264,896$ | $2.24 \%$ |
| $7 / 1 / 1996$ | $\$ 2,445,486,607$ | $1.38 \%$ |
| $7 / 1 / 1995$ | $\$ 2,412,112,063$ | $0.30 \%$ |
| $7 / 1 / 1994$ | $\$ 2,404,881,998$ | $0.51 \%$ |
| $7 / 1 / 1993$ | $\$ 2,392,769,380$ |  |
|  | 20 Year Average | $4.07 \%$ |
|  | 10 Year Average | $3.98 \%$ |
|  | 5 Year Average | $0.92 \%$ |

Source: Orange County Assessor

|  | 20 Years | 10 Years | 5 Years |
| :--- | ---: | ---: | ---: |
| Compounded Annual <br> Growth Rate (CAGR) | $4.02 \%$ | $3.92 \%$ | $0.91 \%$ |

As can be seen in Table 5, the Compounded Annual Growth Rates (CAGR) for AV growth in the district for the last 20, 10 and 5 years are $4.02 \%, 3.92 \%$ and $0.91 \%$ respectively. The district and their financial firm presented data to the Grand Jury that they used to project the AV growth in the calculation of the anticipated future tax rates for the 2008 bonds. Their data shows a 30 -year average growth in AV of $6.01 \%$ between the years 1982 and 2011.

The earlier years of this data clearly contain significant original development that inflated the AV growth in those years. The district is largely built out today. There is still opportunity for in-fill development, but there is very little opportunity for large developments that would significantly add incrementally to the AVs, as was the case in the 1980's. The Grand Jury believes that the last 20 years of AV data are much more representative on what the district can count on going forward for projected AV growth.

As mentioned previously for Savanna, a good test for any estimate is to ask whether there is an equal chance of the estimate being too high or too low. By this standard, the AV growth estimates that the Cypress district and their financial firm used appear to be unreasonably high. The implications of that decision may be found the potential future tax rates for the 2008 bonds that are in Table 6 below.

Table 6

| Cypress Elementary School District Debt Service Analysis |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Debt Service 2008 Series A Bonds | Debt Service <br> 2008 Series B- <br> 1 and B-2 <br> Bonds | Total Debt Service 2008 Bonds | Assessed Values @ 4\% Annual Growth | 2008 Bonds Tax Rate per \$100k of AV @ 4\% AV Growth | Assessed Values @ 6\% Annual Growth | 2008 Bonds Tax Rate per \$100k of AV @ 6\% AV Growth |
| 2013 |  |  |  | \$5,268,689,615 |  | 5,268,689,615 |  |
| 2014 | \$863,650 | \$458,607 | \$1,322,257 | \$5,479,437,200 | 24.13 | 5,584,810,992 | \$23.68 |
| 2015 | \$913,100 | \$458,607 | \$1,371,707 | \$5,698,614,688 | 24.07 | 5,919,899,651 | \$23.17 |
| 2016 | \$970,900 | \$483,608 | \$1,454,508 | \$5,926,559,275 | 24.54 | 6,275,093,630 | \$23.18 |
| 2017 | \$1,033,700 | \$508,607 | \$1,542,307 | \$6,163,621,646 | 25.02 | 6,651,599,248 | \$23.19 |
| 2018 | \$1,093,500 | \$938,607 | \$2,032,107 | \$6,410,166,512 | 31.70 | 7,050,695,203 | \$28.82 |
| 2019 | \$1,160,300 | \$1,033,607 | \$2,193,907 | \$6,666,573,172 | 32.91 | \$7,473,736,915 | \$29.35 |
| 2020 | \$1,228,700 | \$1,121,308 | \$2,350,008 | \$6,933,236,099 | 33.89 | \$7,922,161,130 | \$29.66 |
| 2021 | \$1,298,500 | \$1,213,788 | \$2,512,288 | \$7,210,565,543 | 34.84 | \$8,397,490,798 | \$29.92 |
| 2022 | \$1,372,250 | \$1,291,016 | \$2,663,266 | \$7,498,988,165 | 35.52 | \$8,901,340,246 | \$29.92 |
| 2023 | \$1,450,500 | \$1,375,235 | \$2,825,735 | \$7,798,947,692 | 36.23 | \$9,435,420,661 | \$29.95 |
| 2024 | \$1,537,750 | \$1,453,962 | \$2,991,712 | \$8,110,905,599 | 36.89 | \$10,001,545,900 | \$29.91 |
| 2025 | \$1,628,250 | \$1,547,346 | \$3,175,596 | \$8,435,341,823 | 37.65 | \$10,601,638,654 | \$29.95 |
| 2026 | \$1,721,500 | \$1,640,250 | \$3,361,750 | \$8,772,755,496 | 38.32 | \$11,237,736,974 | \$29.91 |
| 2027 | \$1,822,000 | \$1,746,000 | \$3,568,000 | \$9,123,665,716 | 39.11 | \$11,912,001,192 | \$29.95 |
| 2028 | \$1,929,000 | \$1,850,000 | \$3,779,000 | \$9,488,612,345 | 39.83 | \$12,626,721,264 | \$29.93 |
| 2029 | \$2,031,750 | \$1,975,000 | \$4,006,750 | \$9,868,156,838 | 40.60 | \$13,384,324,540 | \$29.94 |
| 2030 | \$2,145,000 | \$2,100,000 | \$4,245,000 | \$10,262,883,112 | 41.36 | \$14,187,384,012 | \$29.92 |
| 2031 | \$2,260,000 | \$2,240,000 | \$4,500,000 | \$10,673,398,436 | 42.16 | \$15,038,627,053 | \$29.92 |
| 2032 | \$2,380,000 | \$2,394,438 | \$4,774,438 | \$11,100,334,374 | 43.01 | \$15,940,944,676 | \$29.95 |
| 2033 |  | \$5,059,438 | \$5,059,438 | \$11,544,347,749 | 43.83 | \$16,897,401,356 | \$29.94 |
| 2034 | \$2,645,000 | \$2,719,438 | \$5,364,438 | \$12,006,121,659 | 44.68 | \$17,911,245,438 | \$29.95 |
| 2035 |  | \$5,684,438 | \$5,684,438 | \$12,486,366,525 | 45.53 | \$18,985,920,164 | \$29.94 |
| 2036 |  | \$6,025,263 | \$6,025,263 | \$12,985,821,186 | 46.40 | \$20,125,075,374 | \$29.94 |
| 2037 |  | \$6,389,091 | \$6,389,091 | \$13,505,254,034 | 47.31 | \$21,332,579,896 | \$29.95 |
| 2038 |  | \$6,740,921 | \$6,740,921 | \$14,045,464,195 | 47.99 | \$22,612,534,690 | \$29.81 |
| 2039 |  | \$7,109,554 | \$7,109,554 | \$14,607, 282,763 | 48.67 | \$23,969,286,771 | \$29.66 |
| 2040 |  | \$7,499,438 | \$7,499,438 | \$15,191,574,073 | 49.37 | \$25,407, 443,978 | \$29.52 |
| 2041 |  | \$7,913,770 | \$7,913,770 | \$15,799,237,036 | 50.09 | \$26,931,890,616 | \$29.38 |
| 2042 |  | \$8,351,424 | \$8,351,424 | \$16,431,206,518 | 50.83 | \$28,547,804,053 | \$29.25 |
| 2043 |  | \$8,810,346 | \$8,810,346 | \$17,088,454,778 | 51.56 | \$30,260,672,297 | \$29.11 |
| 2044 |  | \$9,293,426 | \$9,293,426 | \$17,771,992,970 | 52.29 | \$32,076,312,634 | \$28.97 |
| 2045 |  | \$9,804,744 | \$9,804,744 | \$18,482,872,688 | 53.05 | \$34,000,891,392 | \$28.84 |
| 2046 |  | \$10,344,991 | \$10,344,991 | \$19,222,187,596 | 53.82 | \$36,040,944,876 | \$28.70 |
| 2047 |  | \$10,859,285 | \$10,859,285 | \$19,991,075,100 | 54.32 | \$38,203,401,569 | \$28.42 |
| 2048 |  | \$11,404,438 | \$11,404,438 | \$20,790,718,104 | 54.85 | \$40,495,605,663 | \$28.16 |
| 2049 |  | \$11,973,688 | \$11,973,688 | \$21,622,346,828 | 55.38 | \$42,925,342,002 | \$27.89 |
| 2050 |  | \$12,574,938 | \$12,574,938 | \$22,487,240,701 | 55.92 | \$45,500,862,523 | \$27.64 |

Source: Official Statement for Cypress Elementary School District General Obligation Bonds, 2008 Election, dated April 16, 2011. Federal interest subsidy for Series B-2 QSCB bonds has been subtracted from the debt service.

Table 6 is very similar to Table 4, which displayed the tax rates for Savanna Elementary School District. Columns 1-3 show the year and the annual debt service for the Series A and Series B-1 and B-2 bonds. Column 4 shows the total annual debt service for the three separate series of 2008 bonds: Series A, B-1 and B-2. Column 5 shows the AVs for future years assuming a $4 \%$ annual growth rate, which is in line with the average AV growth over the past 20 years. Column 6 shows the tax rate for the 2008 bonds that will result in each year with a growth in the AV of $4 \%$ on an annual basis. Column 7 shows the AV for future years assuming a $6 \%$ annual growth rate and Column 8 shows the tax rate for the 2008 bonds that will result in each year with a growth in the AV of $6 \%$ on an annual basis.

Assuming AVs continue to grow at an average rate of 4\%, the 20 year historical average, the 2008 bonds will exceed the expected tax rate of $\$ 30$ per $\$ 100,000$ of AV in 2018 and continue to climb, reaching $\$ 55.92$ per $\$ 100,000$ of AV in 2050 as shown in Table 6. The district's taxpayers were presented tax rates would remain under $\$ 30$ per $\$ 100,000$ of AV when they approved the bond issue in 2008. That projection was made with the assumption that AV growth would average $6 \%$ over the next 40 years. It is more understandable that the district made this assumption in 2008, since this was before the impact of the last recession on property values became apparent. However, when the district issued the Series B-1 and B-2 bonds in 2011, the impact of the recession on property values was very obvious. The district and their financial advisor did not change their assumed AV growth for the 2011 Series B-1 and B-2 bonds; they left the assumed AV growth at $6 \%$.

So what does this mean to the typical homeowner in the district? Assume the district's AVs will continue to grow at the historical annual rate of $4 \%$ per year and the homeowner's home AV grows at the Proposition 13 mandated annual rate of $2 \%$ per year. The district taxpayer will pay an additional $\$ 809$ of taxes for every $\$ 100,000$ of AV for his house between now and when the last bonds mature in 2052 ,or an average of $\$ 20.23$ per year for every $\$ 100,000$ of AV. A homeowner with a house assessed at $\$ 500,000$ today will pay an additional $\$ 4,047$ in taxes between now and when the bonds mature. Note that no discounted cash flow or present value techniques were used in these calculations to avoid additional complexity. Please see Appendix B at the back of the report for the detailed calculations.

If $A V$ growth does average $6 \%$ between now and the year 2050, then the problem goes away and the tax rate for the 2008 bonds never exceeds the legal maximum of $\$ 30$ per $\$ 100,000$ of AV . Please see columns 7 and 8 on Table 6 for the future AVs and resultant tax rates under the $6 \%$ AV growth rate scenario.

How likely is it that AVs will grow at an average rate of $6 \%$ for the next 40 years in the district? The Grand Jury does not think that is very realistic.

## Westminster Elementary School District

Westminster Elementary School District is the largest of the three school districts in Orange County examined in greater detail by the Grand Jury. The district currently operates 13 elementary schools, three middle schools, one child development school and a special programs center. The average daily attendance (ADA) for the district is 9,382 students. Similar to Savanna and Cypress, Westminster is an older, established district in northern Orange County with aged schools in need of renovations.

The voters of the Westminster Elementary School District approved Measure O in November 2008, authorizing the district to borrow $\$ 130,000,000$. The district has issued three series of bonds and two Bond Anticipation Notes (BANs) against the Measure O authorization. The 2009A bonds were issued in October 2009 for an aggregate principal amount of \$34,995,681. The two series of BANs were issued for $\$ 17,000,000$ and $\$ 18,000,000$ in September 2010. Both BANs have since been paid off with the proceeds from the second and third series of bonds issued from the 2008 election. The second series of bonds from the 2008 election, Series 2013A, was issued in March 2013 for an aggregate principal amount of $\$ 20,998,754$. The third series of bonds from the 2008 election, Series 2013B, was issued in December 2013 for an aggregate principal amount of $\$ 22,324,915$.

As was the case in the Savanna and Cypress districts, the Grand Jury was impressed with the school renovations that have been completed. District officials led the Grand Jury on a tour of several of their renovated schools. The district has been very judicious in how they have spent their money and are justifiably proud of their improved facilities.

The loss of state matching funds was not nearly as significant for Westminster as it was for Savanna and Cypress. District officials explained to the Grand Jury that they utilized state matching funds to complete renovations of the elementary schools in the district from 2004 through 2007. Since the district utilized the state matching funds during that time period, they had lower priority for receiving new state matching funds.

The Series 2013B bonds were issued in December 2013, less than a month before AB 182, which restricts CABs, was scheduled to take effect. The bonds had terms up to 40 years, well in excess of the limitation of a 25 -year term contained in AB 182 . The debt ratio for all of the CIBs and CABs in Series 2013B is 5.78:1, well in excess of the $4: 1$ standard. The two longest term CABs in the 2013B Series have debt ratios of 10.83:1 and 16.17:1.

Similar to Savanna and Cypress, there are also issues with how Westminster projected AV into the future and the resultant potential impact on tax rates. Westminster was very "creative" in their approach.

The Grand Jury reviewed the data used by Westminster to project future AV growth. The AV growth is projected by Westminster to average $4.219 \%$ for the next 40 years. On the surface, that sounds very reasonable. The Grand Jury's 20-year historical data for Westminster AVs may
be found in Table 7 below. As can be seen in Table 7, the 20 year average growth in AVs is $4.05 \%$; the Compounded Annual Growth Rate (CAGR) for the last 20 years was $3.98 \%$.

The problem with the Westminster's future AV projection of average annual growth of $4.219 \%$ is how they projected the AVs year by year. From 2017 to 2041 the projected growth in AVs never falls below $5 \%$ annually, cycling between a high $8 \%$ and a low of $5 \%$ every five years. But suddenly, the AV growth slows dramatically from 2044 through 2053, never getting above $2 \%$. How does the district explain that logic? The short answer is top district officials and the district's financial firm could not explain to the Grand Jury how they came to this assumption other than to make very general statements that this was their best estimate of future AVs.

What are the ramifications of Westminster's "creative" AV projections? The tax rate that Westminster projects for the combined series of bonds (Series 2009A, Series 2013A and Series 2013B) barely stays below the legal limit of $\$ 30$ per $\$ 100,000$ of AV from 2017 to 2053. The only way this can happen is for the AVs to grow at close to an average of close to $6 \%$ through 2041. Please refer to Table 7 below for the last 20 years historical growth for AVs.

Table 7

| Westminster Elementary School District Assessed Values |  |  |
| :---: | :---: | :---: |
| Year | Total Assessed Values Assessor Data | $\begin{array}{\|l} \hline \% \\ \text { Change } \\ \hline \end{array}$ |
| 7/1/2013 | \$7,584,638,808 | 2.44\% |
| 7/1/2012 | \$7,403,653,626 | 1.75\% |
| 7/1/2011 | \$7,276,559,130 | -1.84\% |
| 7/1/2010 | \$7,413,274,893 | 4.46\% |
| 7/1/2009 | \$7,096,805,673 | -0.58\% |
| 7/1/2008 | \$7,137,979,035 | 1.97\% |
| 7/1/2007 | \$7,000,205,684 | 7.53\% |
| 7/1/2006 | \$6,509,868,902 | 12.23\% |
| 7/1/2005 | \$5,800,681,191 | 1.96\% |
| 7/1/2004 | \$5,689,269,060 | 6.60\% |
| 7/1/2003 | \$5,337,163,590 | 6.06\% |
| 7/1/2002 | \$5,032,037,822 | 6.20\% |
| 7/1/2001 | \$4,738,085,580 | 7.09\% |
| 7/1/2000 | \$4,424,277,723 | 8.96\% |
| 7/1/1999 | \$4,060,339,721 | 9.17\% |
| 7/1/1998 | \$3,719,278,844 | 1.86\% |
| 7/1/1997 | \$3,651,403,093 | 4.58\% |
| 7/1/1996 | \$3,491,397,392 | 1.12\% |
| 7/1/1995 | \$3,452,676,674 | -0.96\% |
| 7/1/1994 | \$3,486,099,822 | 0.39\% |
| 7/1/1993 | \$3,472,512,246 |  |
|  | 20 Year Average | 4.05\% |
|  | 10 Year Average | 3.65\% |
|  | 5 Year Average | 1.25\% |

Source: Orange County Assessor

|  | 20 Years | 10 Years | 5 Years |
| :--- | ---: | ---: | ---: |
| Compounded Annual <br> Growth Rate (CAGR) | $3.98 \%$ | $3.57 \%$ | $1.22 \%$ |

As was the case with Savanna and Cypress, AV growth in the district over the last 20 years has averaged close to $4 \%$ annually. Clearly, there are years with stronger growth during good economic times and years with negative growth during challenging economic times. Given the

AV growth averaging $4 \%$ over the last 20 years, what is the probability that AV growth will average close to $6 \%$ between now and 2041? Not likely in the opinion of the Grand Jury.

Table 8 shows the Debt Service Analysis for Westminster Elementary School District. It is very similar to Table 4 for Savanna Elementary School District and Table 6 for Cypress Elementary School District. Columns 1-3 show the year, Debt Service for the Series 2009A Bonds and Debt Service for the Series A\&B 2013 Bonds. AV growth calculated at $4 \%$ annual growth and the 2008 Election Tax Rate per $\$ 100 \mathrm{~K}$ of AV at $4 \%$ annual growth are shown in columns 4 and 5. AV growth calculated at $6 \%$ annual growth and the 2008 Election Tax Rate per $\$ 100 \mathrm{~K}$ of AV at 6\% annual growth are shown in columns 6 and 7 .

The district will exceed the $\$ 30$ per $\$ 100,000$ of AV legal tax rate in 2018 if AV growth continues at the historical level of $4 \%$. Assuming $4 \%$ annual AV growth, the tax rate steadily climbs, peaking at $\$ 48.04$ in 2043 before beginning to fall off, dropping to $\$ 36.18$ in 2053. Please refer to Table 8 below.

Table 8

| Westminster Elementary School District Debt Service Analysis |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Debt Service Series 2009A-1 Bonds | Debt Service Series A\&B 2013 Bonds | $\begin{array}{\|c\|} \hline 2008 \text { Election } \\ \text { Total Debt } \\ \text { Service } \\ \hline \end{array}$ | Assessed Values @ 4\% Annual Growth | 2008 Election <br> Tax Rate per \$100k of AV @ 4\% AV Growth | Assessed Values @ 6\% Annual Growth | 2008 Election <br> Tax Rate per \$100k of AV @ 6\% AV Growth |
| 2013 |  |  |  | \$7,584,638,808 |  | \$7,584,638,808 |  |
| 2014 | \$1,814,000 | \$341,704 | \$2,155,704 | \$7,888,024,360 | \$27.33 | \$8,039,717,136 | \$26.81 |
| 2015 | \$1,544,000 | \$598,213 | \$2,142,213 | \$8,203,545,335 | \$26.11 | \$8,522,100,165 | \$25.14 |
| 2016 | \$2,084,000 | \$269,613 | \$2,353,613 | \$8,531,687,148 | \$27.59 | \$9,033,426,175 | \$26.05 |
| 2017 | \$2,224,000 | \$369,613 | \$2,593,613 | \$8,872,954,634 | \$29.23 | \$9,575,431,745 | \$27.09 |
| 2018 | \$1,889,000 | \$916,463 | \$2,805,463 | \$9,227,872,819 | \$30.40 | \$10,149,957,650 | \$27.64 |
| 2019 | \$2,474,000 | \$526,463 | \$3,000,463 | \$9,596,987,732 | \$31.26 | \$10,758,955,109 | \$27.89 |
| 2020 | \$2,574,000 | \$606,463 | \$3,180,463 | \$9,980,867,241 | \$31.87 | \$11,404,492,415 | \$27.89 |
| 2021 | \$2,659,000 | \$681,463 | \$3,340,463 | \$10,380,101,931 | \$32.18 | \$12,088,761,960 | \$27.63 |
| 2022 | \$2,764,000 | \$776,463 | \$3,540,463 | \$10,795,306,008 | \$32.80 | \$12,814,087,678 | \$27.63 |
| 2023 | \$2,899,000 | \$926,463 | \$3,825,463 | \$11,227,118,249 | \$34.07 | \$13,582,932,938 | \$28.16 |
| 2024 | \$3,074,000 | \$1,021,463 | \$4,095,463 | \$11,676,202,979 | \$35.08 | \$14,397,908,915 | \$28.44 |
| 2025 | \$3,284,000 | \$1,056,463 | \$4,340,463 | \$12,143,251,098 | \$35.74 | \$15,261,783,450 | \$28.44 |
| 2026 | \$3,484,000 | \$1,074,100 | \$4,558,100 | \$12,628,981,142 | \$36.09 | \$16,177,490,457 | \$28.18 |
| 2027 | \$3,659,000 | \$1,176,525 | \$4,835,525 | \$13,134,140,387 | \$36.82 | \$17,148,139,884 | \$28.20 |
| 2028 | \$3,804,000 | \$1,418,400 | \$5,222,400 | \$13,659,506,003 | \$38.23 | \$18,177,028,277 | \$28.73 |
| 2029 | \$3,919,000 | \$1,670,000 | \$5,589,000 | \$14,205,886,243 | \$39.34 | \$19,267,649,974 | \$29.01 |
| 2030 | \$4,134,000 | \$1,790,000 | \$5,924,000 | \$14,774,121,693 | \$40.10 | \$20,423,708,972 | \$29.01 |
| 2031 | \$4,337,250 | \$1,885,000 | \$6,222,250 | \$15,365,086,560 | \$40.50 | \$21,649,131,510 | \$28.74 |
| 2032 | \$4,602,500 | \$1,992,375 | \$6,594,875 | \$15,979,690,023 | \$41.27 | \$22,948,079,401 | \$28.74 |
| 2033 | \$4,920,750 | \$2,199,288 | \$7,120,038 | \$16,618,877,624 | \$42.84 | \$24,324,964,165 | \$29.27 |
| 2034 | \$5,213,250 | \$2,334,888 | \$7,548,138 | \$17,283,632,729 | \$43.67 | \$25,784,462,015 | \$29.27 |
| 2035 |  | \$7,849,150 | \$7,849,150 | \$17,974,978,038 | \$43.67 | \$27,331,529,736 | \$28.72 |
| 2036 |  | \$8,318,913 | \$8,318,913 | \$18,693,977,159 | \$44.50 | \$28,971,421,520 | \$28.71 |
| 2037 |  | \$8,987,125 | \$8,987,125 | \$19,441,736,246 | \$46.23 | \$30,709,706,811 | \$29.26 |
| 2038 |  | \$9,530,375 | \$9,530,375 | \$20,219,405,696 | \$47.13 | \$32,552,289,220 | \$29.28 |
| 2039 |  | \$9,909,686 | \$9,909,686 | \$21,028,181,923 | \$47.13 | \$34,505,426,573 | \$28.72 |
| 2040 |  | \$10,504,475 | \$10,504,475 | \$21,869,309,200 | \$48.03 | \$36,575,752,167 | \$28.72 |
| 2041 |  | \$11,032,335 | \$11,032,335 | \$22,744,081,568 | \$48.51 | \$38,770,297,298 | \$28.46 |
| 2042 |  | \$11,474,615 | \$11,474,615 | \$23,653,844,831 | \$48.51 | \$41,096,515,135 | \$27.92 |
| 2043 |  | \$11,816,899 | \$11,816,899 | \$24,599,998,624 | \$48.04 | \$43,562,306,043 | \$27.13 |
| 2044 |  | \$12,056,156 | \$12,056,156 | \$25,583,998,569 | \$47.12 | \$46,176,044,406 | \$26.11 |
| 2045 |  | \$12,177,338 | \$12,177,338 | \$26,607,358,512 | \$45.77 | \$48,946,607,070 | \$24.88 |
| 2046 |  | \$12,235,055 | \$12,235,055 | \$27,671,652,853 | \$44.22 | \$51,883,403,495 | \$23.58 |
| 2047 |  | \$12,358,928 | \$12,358,928 | \$28,778,518,967 | \$42.94 | \$54,996,407,704 | \$22.47 |
| 2048 |  | \$12,545,010 | \$12,545,010 | \$29,929,659,725 | \$41.91 | \$58,296,192,167 | \$21.52 |
| 2049 |  | \$12,797,466 | \$12,797,466 | \$31,126,846,114 | \$41.11 | \$61,793,963,697 | \$20.71 |
| 2050 |  | \$12,988,403 | \$12,988,403 | \$32,371,919,959 | \$40.12 | \$65,501,601,518 | \$19.83 |
| 2051 |  | \$13,120,909 | \$13,120,909 | \$33,666,796,757 | \$38.97 | \$69,431,697,610 | \$18.90 |
| 2052 |  | \$13,187,328 | \$13,187,328 | \$35,013,468,628 | \$37.66 | \$73,597,599,466 | \$17.92 |
| 2053 |  | \$13,175,000 | \$13,175,000 | \$36,414,007,373 | \$36.18 | \$78,013,455,434 | \$16.89 |

Source: Official Statement for Westminster Elementary School District General Obligation Bonds, 2008 Election, Series 2013B, dated December 5, 2013.

So what does this mean to the typical homeowner in the district? Assume the district's AVs will continue to grow at the historical annual rate of $4 \%$ per year and the homeowner's home AV grows at the Proposition 13 mandated annual rate of $2 \%$ per year. The district taxpayer will pay an additional $\$ 628$ of taxes for every $\$ 100,000$ of AV for his house between now and when the last bonds mature in 2052. A homeowner with a house assessed at $\$ 500,000$ today will pay an additional $\$ 3,142$ in taxes between now and when the bonds mature, or an average of $\$ 15.70$ per year for every $\$ 100,000$ of AV. Note that no discounted cash flow or present value techniques were used in these calculations to avoid additional complexity. Please see Appendix C at the back of the report for the detailed calculations.

The future growth rate of AVs is again the key issue. What is the probability that the growth rate for the Westminster Elementary School District AVs will average 6\% between today and 2041 given the average growth rate for AVs in the district is $4 \%$ for the last 20 years? The Grand Jury does not believe the district's AV growth rate will average 6\% through 2041.

## Where Do We Go From Here?

The Grand Jury believes this report makes a very strong case on why taxpayers in the Savanna, Cypress and Westminster Elementary School Districts should expect unanticipated tax increases in the future because the three school districts made unrealistic assumptions on AV growth. The question now becomes: What can be done going forward to require all of the school districts in Orange County to become much more transparent about the AV assumptions that underpin future bond issues that are put before the voters for approval?

The Grand Jury interviewed several top officials at Orange County Department of Education (OCDE) to review this issue with them and to see if OCDE could play a role in overseeing the school district AV assumptions for future bond issues. OCDE told the Grand Jury they did not have any legal authority to provide that oversight. However, the Grand Jury does not see any reason why OCDE could not be part of oversight process with the concurrence of the school district sponsoring the bond issue.

The only other solution to getting improved transparency for AV assumptions used in new bond issues is to ask all of the school districts in Orange County to voluntarily disclose their AV assumptions and supporting historical data in materials made available to voters. The districts would be asked to explain the basis of their AV assumptions and provide justification for why their AV assumptions are equally likely to either be too high or too low.

There is no question that many school districts are in difficult positions with respect to upgrading their schools to meet the $21^{\text {st }}$ century requirements. In many cases, they are reluctant to go back to the voters to get approval for a new bond issue because they know the public is much more aware of the negative publicity surrounding bond issues, particularly CABs. As can be seen in Tables 4, 6 and 8 for Savanna, Cypress and Westminster Elementary School Districts, one way to stretch bond dollars further is to project higher AV annual growth rates. It is clear that when
looking at these tables that the higher AV growth rate results in a lower tax rate. This is critical when the district is trying to keep the tax rate under the legal maximum for elementary school districts of $\$ 30$ per $\$ 100,000$ of AV. It is not fair to the taxpayers to project unrealistic AVs.

Penal Code $\S 933$ and $\S 933.05$ require governing bodies and elected officials to which a report is directed to respond to findings and recommendations. Responses are requested, from departments of local agencies and their non-elected department heads.

## FINDINGS

In accordance with California Penal Code Sections 933 and 933.05, the 2013-2014 Grand Jury requires (or, as noted, requests) responses from each agency affected by the findings presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation of School Bonds - The Untold Story of Assessed Values, the 20132014 Orange County Grand Jury has arrived at nine principal findings, as follows:
F.1. Taxpayers in the Westminster, Cypress and Savanna Elementary School Districts will potentially be faced with significantly higher tax rates in future years to repay school construction bonds.
F.2. The funds raised through these school bonds for the Westminster, Cypress and Savanna Elementary School Districts have been spent on much needed capital improvements. All three of these districts were faced with schools that in some cases had not been renovated in over 50 years. These districts are making tremendous progress in bringing their schools up to a $21^{\text {st }}$ Century standard.
F.3. Savanna Elementary School District received a waiver from the State Board of Education in July 2012 to exceed the bonded indebtedness limit of $1.25 \%$ of assessed values (AVs). Savanna applied for the waiver before exceeding the bonded indebtedness limit.
F.4. School districts located in lower AV areas are at a distinct disadvantage in terms of their bonding capacity per student. For instance, Laguna Beach Unified School District has over ten times the bonding capacity per student as Garden Grove Unified School District.
F.5. The 20 year average for growth in AVs for the Savanna, Cypress and Westminster Elementary School Districts are approximately $4 \%$ per year.
F.6. The assumptions made for the expected growth in AVs in the future years has a very significant effect on the corresponding tax rates. For example, in the Savanna Elementary School District, the tax rate will be $\$ 60.74$ per $\$ 100,000$ of AV in the year 2052 if the AVs continue to grow at an average of $4 \%$ per year. The tax rate falls to $\$ 20.04$ per $\$ 100,000$ of AV in the year 2052 if the AVs grow at an average rate of $7 \%$.
F.7. The homeowners and property owners will pay additional taxes of $\$ 2,025, \$ 809$ and $\$ 628$ per $\$ 100,000$ of AV over the term of the bonds in the Savanna, Cypress and Westminster Elementary School Districts respectively if AVs continue to grow at the historical rate of $4 \%$.
F.8. The methodology used by the Savanna, Cypress and Westminster Elementary School Districts to estimate the future growth rates for AVs does not appear to be reliable to the Grand Jury. Savanna and Cypress relied on average growth of AVs over a 35 -year period. The first 10 to 15 years of this historical data includes a considerable amount of original development, thereby inflating the average AV growth rate. Westminster developed an estimate of AV growth that appears to have no historical or factual basis. AV growth is projected to average around $6 \%$ from the years 2017 - 2041, and then tails off dramatically for the last 10 years of the bonds, averaging less than $2 \%$. Using this estimate, Westminster projects the district will never exceed the legal tax rate of $\$ 30$ per $\$ 100,000$.
F.9. Orange County Department of Education (OCDE) does not have any statutory authority to ensure all Orange County school districts properly disclose assessed value assumptions for bond measures being presented to voters for approval.

## RECOMMENDATIONS

In accordance with California Penal Code Sections 933 and 933.05, the 2013-2014 Grand Jury requires (or, as noted, requests) responses from each agency affected by the recommendations presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation of School Bonds - The Untold Story of Assessed Values, the 20132014 Orange County Grand Jury makes the following two recommendations:
R.1. All school districts in Orange County should include a clear explanation of the assumed future growth rate of assessed values in the bond election materials made available to voters for future bond issues. This explanation should reference the relevant historical assessed value data for the individual district. For instance, if the district is fundamentally built out, the historical assessed value data should not include years with significant development because that is not indicative of the district's current and future situation. (F.1., F.5., F.6., F.7., F.8.)
R.2. Although there is no statutory requirement, the Orange County Department of Education (OCDE) should evaluate whether to assume voluntary oversight responsibility, with concurrence of the individual school district issuing the bonds, to ensure all Orange County school districts properly disclose their assessed value assumptions used for future bond measures. (F.9)

## REQUIRED RESPONSES

The California Penal Code $\S 933$ requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made no later than 90 days after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an elected County official (e.g. District Attorney, Sheriff, etc.), such comment shall be made within 60 days to the Presiding Judge with an information copy sent to the Board of Supervisors.

Furthermore, California Penal Code Section $\S 933.05$ (a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:
(a) As to each Grand Jury finding, the responding person or entity shall indicate one of the following:
(1) The respondent agrees with the finding
(2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefore.
(b) As to each Grand Jury recommendation, the responding person or entity shall report one of the following actions:
(1) The recommendation has been implemented, with a summary regarding the implemented action.
(2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
(3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the Grand Jury report.
(4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefore.
(c) If a finding or recommendation of the Grand Jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the Grand Jury, but the response of the Board of Supervisors shall address only those budgetary /or personnel matters over which
it has some decision making aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with Penal Code section §933.05 are required from:

Responses Required:
Savanna, Cypress and Westminster Elementary School Districts: F.1., F.2., F.5., F.6., F.7., F.8. Savanna Elementary School District: F.3.

Superintendent of Schools, Orange County Department of Education: F.4., F.9.

Elementary Districts: Anaheim City, Buena Park, Centralia, Cypress, Fountain Valley, Fullerton, Huntington Beach, La Habra, Magnolia, Ocean View, Savanna, Westminster: R1

High School Districts: Anaheim Union, Fullerton Joint, Huntington Beach: R1
Unified Districts: Brea-Olinda, Capistrano, Garden Grove, Irvine, Laguna Beach, Los Alamitos, Newport-Mesa, Orange, Placentia-Yorba Linda, Saddleback Valley, Santa Ana, Tustin: R1

Superintendent of Schools, Orange County Department of Education: R.1., R.2.

## APPENDICES

School Bonds - The Untold Story of Assessed Values

## Appendix A - Additional Tax Calculation for Savanna Elementary School District

|  | Savanna Elementary School District Excess Tax Analysis |  |  |  |  |  |  |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |

Appendix B - Additional Tax Calculation for Cypress Elementary School District

| Cypress Elementary School District Excess Tax Analysis |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Total Debt Service 2008 Bonds | Assessed Values @ 4\% Annual Growth | 2008 Bonds <br> Tax Rate per \$100k of AV @ 4\% AV Growth | AV of Home | $\begin{array}{\|c\|} \hline \text { Excess of } \\ \$ 30 \text { per } \\ \$ 100 \mathrm{~K} \text { of } \\ \text { AV } \\ \hline \end{array}$ |
| 2013 |  | \$5,268,689,615 |  | \$500,000 |  |
| 2014 | \$1,322,257 | \$5,479,437,200 | 24.13 | \$510,000 |  |
| 2015 | \$1,371,707 | \$5,698,614,688 | 24.07 | \$520,200 |  |
| 2016 | \$1,454,508 | \$5,926,559,275 | 24.54 | \$530,604 |  |
| 2017 | \$1,542,307 | \$6,163,621,646 | 25.02 | \$541,216 |  |
| 2018 | \$2,032,107 | \$6,410,166,512 | 31.70 | \$552,040 | \$9 |
| 2019 | \$2,193,907 | \$6,666,573,172 | 32.91 | \$563,081 | \$16 |
| 2020 | \$2,350,008 | \$6,933,236,099 | 33.89 | \$574,343 | \$22 |
| 2021 | \$2,512,288 | \$7,210,565,543 | 34.84 | \$585,830 | \$28 |
| 2022 | \$2,663,266 | \$7,498,988,165 | 35.52 | \$597,546 | \$33 |
| 2023 | \$2,825,735 | \$7,798,947,692 | 36.23 | \$609,497 | \$38 |
| 2024 | \$2,991,712 | \$8,110,905,599 | 36.89 | \$621,687 | \$43 |
| 2025 | \$3,175,596 | \$8,435,341,823 | 37.65 | \$634,121 | \$48 |
| 2026 | \$3,361,750 | \$8,772,755,496 | 38.32 | \$646,803 | \$54 |
| 2027 | \$3,568,000 | \$9,123,665,716 | 39.11 | \$659,739 | \$60 |
| 2028 | \$3,779,000 | \$9,488,612,345 | 39.83 | \$672,934 | \$66 |
| 2029 | \$4,006,750 | \$9,868,156,838 | 40.60 | \$686,393 | \$73 |
| 2030 | \$4,245,000 | \$10,262,883,112 | 41.36 | \$700,121 | \$80 |
| 2031 | \$4,500,000 | \$10,673,398,436 | 42.16 | \$714,123 | \$87 |
| 2032 | \$4,774,438 | \$11,100,334,374 | 43.01 | \$728,406 | \$95 |
| 2033 | \$5,059,438 | \$11,544,347,749 | 43.83 | \$742,974 | \$103 |
| 2034 | \$5,364,438 | \$12,006,121,659 | 44.68 | \$757,833 | \$111 |
| 2035 | \$5,684,438 | \$12,486,366,525 | 45.53 | \$772,990 | \$120 |
| 2036 | \$6,025,263 | \$12,985,821,186 | 46.40 | \$788,450 | \$129 |
| 2037 | \$6,389,091 | \$13,505,254,034 | 47.31 | \$804,219 | \$139 |
| 2038 | \$6,740,921 | \$14,045,464,195 | 47.99 | \$820,303 | \$148 |
| 2039 | \$7,109,554 | \$14,607,282,763 | 48.67 | \$836,709 | \$156 |
| 2040 | \$7,499,438 | \$15,191,574,073 | 49.37 | \$853,443 | \$165 |
| 2041 | \$7,913,770 | \$15,799,237,036 | 50.09 | \$870,512 | \$175 |
| 2042 | \$8,351,424 | \$16,431,206,518 | 50.83 | \$887,922 | \$185 |
| 2043 | \$8,810,346 | \$17,088,454,778 | 51.56 | \$905,681 | \$195 |
| 2044 | \$9,293,426 | \$17,771,992,970 | 52.29 | \$923,794 | \$206 |
| 2045 | \$9,804,744 | \$18,482,872,688 | 53.05 | \$942,270 | \$217 |
| 2046 | \$10,344,991 | \$19,222,187,596 | 53.82 | \$961,116 | \$229 |
| 2047 | \$10,859,285 | \$19,991,075,100 | 54.32 | \$980,338 | \$238 |
| 2048 | \$11,404,438 | \$20,790,718,104 | 54.85 | \$999,945 | \$249 |
| 2049 | \$11,973,688 | \$21,622,346,828 | 55.38 | \$1,019,944 | \$259 |
| 2050 | \$12,574,938 | \$22,487,240,701 | 55.92 | \$1,040,343 | \$270 |

Source: Official Statement for Cypress Elementary School District (\$4,047 dated April 16, 2011. Federal interest subsidy for Series B-2 QSCB bonds has been subtracted from the debt service.

Appendix C - Additional Tax Calculation for Westminster Elementary School District

| Westminster Elementary School District Excess Tax Analysis |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 2008 Election <br> Total Debt Service | Assessed Values @ 4\% Annual Growth | 2008 Election Tax Rate per \$100k of AV @ 4\% AV Growth | AV of Home | Taxes in <br> Excess of <br> $\$ 30$ per <br> \$100K of AV |
| 2013 |  | \$7,584,638,808 |  |  |  |
| 2014 | \$2,155,704 | \$7,888,024,360 | \$27.33 | \$500,000 |  |
| 2015 | \$2,142,213 | \$8,203,545,335 | \$26.11 | \$510,000 |  |
| 2016 | \$2,353,613 | \$8,531,687,148 | \$27.59 | \$520,200 |  |
| 2017 | \$2,593,613 | \$8,872,954,634 | \$29.23 | \$530,604 |  |
| 2018 | \$2,805,463 | \$9,227,872,819 | \$30.40 | \$541,216 | \$2 |
| 2019 | \$3,000,463 | \$9,596,987,732 | \$31.26 | \$552,040 | \$7 |
| 2020 | \$3,180,463 | \$9,980,867,241 | \$31.87 | \$563,081 | \$11 |
| 2021 | \$3,340,463 | \$10,380,101,931 | \$32.18 | \$574,343 | \$13 |
| 2022 | \$3,540,463 | \$10,795,306,008 | \$32.80 | \$585,830 | \$16 |
| 2023 | \$3,825,463 | \$11,227,118,249 | \$34.07 | \$597,546 | \$24 |
| 2024 | \$4,095,463 | \$11,676,202,979 | \$35.08 | \$609,497 | \$31 |
| 2025 | \$4,340,463 | \$12,143,251,098 | \$35.74 | \$621,687 | \$36 |
| 2026 | \$4,558,100 | \$12,628,981,142 | \$36.09 | \$634,121 | \$39 |
| 2027 | \$4,835,525 | \$13,134,140,387 | \$36.82 | \$646,803 | \$44 |
| 2028 | \$5,222,400 | \$13,659,506,003 | \$38.23 | \$659,739 | \$54 |
| 2029 | \$5,589,000 | \$14,205,886,243 | \$39.34 | \$672,934 | \$63 |
| 2030 | \$5,924,000 | \$14,774,121,693 | \$40.10 | \$686,393 | \$69 |
| 2031 | \$6,222,250 | \$15,365,086,560 | \$40.50 | \$700,121 | \$73 |
| 2032 | \$6,594,875 | \$15,979,690,023 | \$41.27 | \$714,123 | \$80 |
| 2033 | \$7,120,038 | \$16,618,877,624 | \$42.84 | \$728,406 | \$94 |
| 2034 | \$7,548,138 | \$17,283,632,729 | \$43.67 | \$742,974 | \$102 |
| 2035 | \$7,849,150 | \$17,974,978,038 | \$43.67 | \$757,833 | \$104 |
| 2036 | \$8,318,913 | \$18,693,977,159 | \$44.50 | \$772,990 | \$112 |
| 2037 | \$8,987,125 | \$19,441,736,246 | \$46.23 | \$788,450 | \$128 |
| 2038 | \$9,530,375 | \$20,219,405,696 | \$47.13 | \$804,219 | \$138 |
| 2039 | \$9,909,686 | \$21,028,181,923 | \$47.13 | \$820,303 | \$140 |
| 2040 | \$10,504,475 | \$21,869,309,200 | \$48.03 | \$836,709 | \$151 |
| 2041 | \$11,032,335 | \$22,744,081,568 | \$48.51 | \$853,443 | \$158 |
| 2042 | \$11,474,615 | \$23,653,844,831 | \$48.51 | \$870,512 | \$161 |
| 2043 | \$11,816,899 | \$24,599,998,624 | \$48.04 | \$887,922 | \$160 |
| 2044 | \$12,056,156 | \$25,583,998,569 | \$47.12 | \$905,681 | \$155 |
| 2045 | \$12,177,338 | \$26,607,358,512 | \$45.77 | \$923,794 | \$146 |
| 2046 | \$12,235,055 | \$27,671,652,853 | \$44.22 | \$942,270 | \$134 |
| 2047 | \$12,358,928 | \$28,778,518,967 | \$42.94 | \$961,116 | \$124 |
| 2048 | \$12,545,010 | \$29,929,659,725 | \$41.91 | \$980,338 | \$117 |
| 2049 | \$12,797,466 | \$31,126,846,114 | \$41.11 | \$999,945 | \$111 |
| 2050 | \$12,988,403 | \$32,371,919,959 | \$40.12 | \$1,019,944 | \$103 |
| 2051 | \$13,120,909 | \$33,666,796,757 | \$38.97 | \$1,040,343 | \$93 |
| 2052 | \$13,187,328 | \$35,013,468,628 | \$37.66 | \$1,061,149 | \$81 |
| 2053 | \$13,175,000 | \$36,414,007,373 | \$36.18 | \$1,082,372 | \$67 |
| Source: Official Statement for Westminster Elementary School \$3,142 |  |  |  |  |  |
| District General Obligation Bonds, 2008 Election, Series 2013B, dated |  |  |  |  |  |
| December 5, 2013. |  |  |  |  |  |


[^0]:    ${ }^{1}$ San Diego Union Tribune, August 20, 2012

[^1]:    ${ }^{2}$ Amended Section 15146 and add Sections 15140.5 , 15144.1-3 to Education Code, add Sections 53508.5-6 to Government Code relating to Bonds

[^2]:    ${ }^{3}$ Financing School Facilities in California by Eric Brunner, Department of Economics, Quinnipiac University, 2006
    ${ }^{4}$ Not to be confused with Proposition 39 passed in November, 2012

[^3]:    ${ }^{5}$ California State Board of Education, Meeting Agenda Items for July 18-19, 2012 Item W-14

[^4]:    ${ }_{7}^{6} \mathrm{http}: / /$ www.ocde.us/Pages/default.aspx
    ${ }^{7}$ http://emma.msrb.org/Home

