FINANCIAL FORECAST

Introduction

"It is far better to foresee even without certainty than not to foresee at all."
--Henri Poincare

Predicting future budgets is challenging because of the wide number of economic, demographic and policy variables involved. Many factors which drive the forecast are beyond the control of the City, such as inflation, employer pension rates, federal and state spending cuts, statewide ballot initiatives, short-term economic cycles, and emergencies. The City Council does influence salary and benefit costs through the labor negotiation process, and by the staffing levels set through the budget process. Revenues are largely controlled by other levels of government, or require voter approval, but the City can set fee levels to not exceed related costs, and can approve new development through the planning process. All of these factors cannot be known with certainty in advance, but one can make reasonable assumptions

The City has a history of forecasting, which is a best practice of the Government Finance Officers Association. This is the third consecutive year the City has incorporated a Financial Forecast generated by a budget forecasting model prepared for the City by Management Partners. This model can readily reflect a wide range of assumptions and forecast scenarios, and displays an extensive dashboard of charts that update automatically as variables are changed. Following the recommendation of the Finance and Budget Commission, the City uses it to produce a 20-year forecast. This longer time frame captures long-term changes in pension costs and is in line with the 20-30 year time frame of recent infrastructure studies.

The 20-year budget model and Financial Forecast serves as an important fiscal strategic planning tool. It provides a macro level view of General Fund revenues and expenditures to assist in evaluating the impact of policy choices made today on the long-term fiscal health of the City. By identifying developing trends and potential issues that may arise in the future, it will help ensure long-term stability for the organization by giving policy-makers improved information with which to craft prudent and timely budget solutions. The fact that there are restrictions imposed by the State that limit local governments in their discretion to raise revenues adds weight to the importance of long-term financial forecasting.

Forecasting is all about assumptions. This Financial Forecast focuses on what is likely to happen to the General Fund based on past experience and a realistic assessment of what might happen in the future. This forecast is a snapshot in time, but the beauty of the budget model is that it is constantly being updated with new information and can be adjusted as circumstances and trends begin to change. By being transparent about the assumptions that go into the forecast, and what is funded versus needs that are not funded, the City will promote better understanding of its financial condition and improve the credibility of its forecasting efforts.

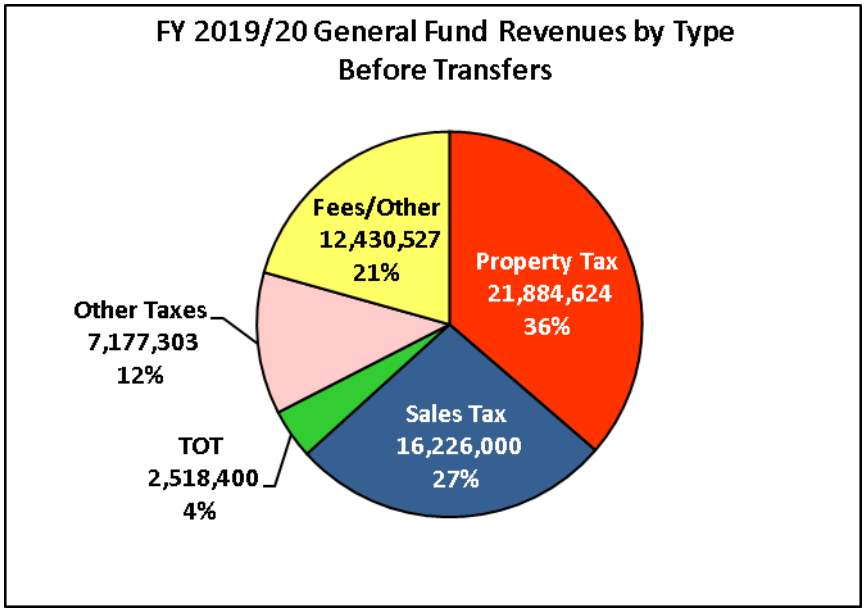
What Distinguishes the Davis Budget Model from Other Forecasts

There are three areas in which the City of Davis' long-range forecast distinguishes itself from typical city budgeting practices.

- There is a strong commitment to forecasting from City leadership, starting with executive management and the Finance Department staff, and encouraged by an active Finance and Budget Commission and a supportive City Council.
- The process is policy-driven to achieve three over-arching objectives:
    - To maintain an adequate reserve to ensure long-term fiscal stability.
    - To maintain funding for operations at a level consistent with past levels per capita, in response to future population and workload growth.
    - To identify and fund infrastructure maintenance needs to maintain the city's investment in its streets, parks and other facilities.
- The model itself is very comprehensive and empirical in its approach to forecasting to ensure a realistic outcome and higher level of credibility. Key features include:
    - Pension costs are based on a long-range forecast of normal costs and unfunded liability, which includes an assumed decline in the CalPERS investment discount rate over the next 20 years.
    - Recessions built into the forecast to provide a realistic "stress test" of city finances.
    - Property tax forecast built upon the growth elements of Prop 13 inflator, Prop 8 recovery value, ownership transfers, and new construction tied to the City's development forecast.
    - Sales tax forecast is based on the "most likely" multi-year projection by business sector, prepared by the City's sales tax auditor.
    - Personnel costs incorporate inflation-based wage increases over time, along with the aggregate impact of merit increases and savings from projected employee turnover and vacancies.
    - Revenue and expenditure growth associated with major development projects like Nishi and West Davis Active Adult Community (WDAAC) are built into the forecast, along with 1.0 full-time equivalent (FTE) growth annually, so that the forecast incorporates growth-related impacts.
    - City-initiated infrastructure studies provide the basis for measuring progress in meeting the major maintenance needs of street and bike patch resurfacing, traffic maintenance, facilities and parks. It should be noted that most cities have not undertaken such studies. The City of Davis has committed itself to an aggressive program to identify and fund these needs over the next 20 years.

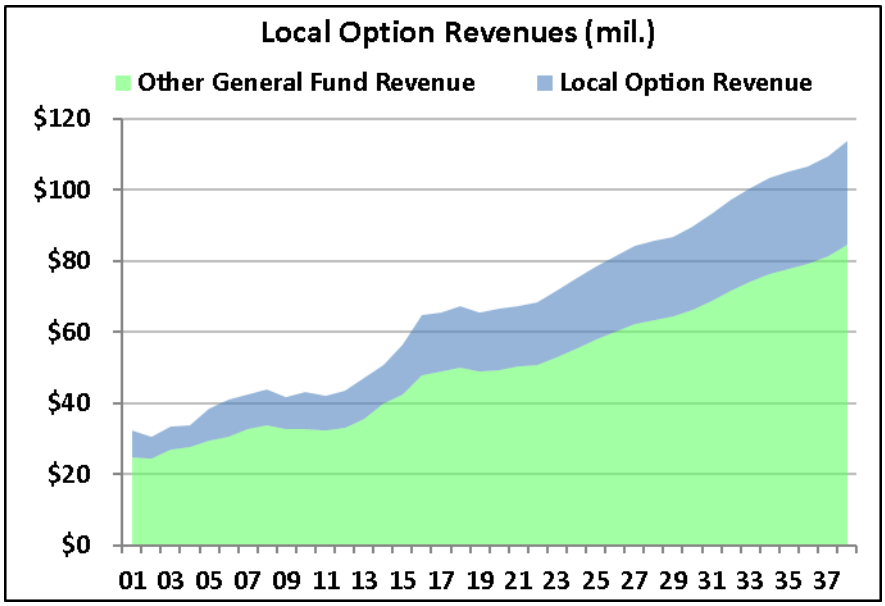
General Fund Revenues

The amount of money available to fund services and programs through the General Fund is determined by the dollars generated by the City's economic base and revenue structure. The General Fund provides the only discretionary revenue available to the Council and citizens to directly support local priorities. The General Fund provides most of the funding for services such as police and fire protection, parks, recreation, community development, as well as most of the administrative and support functions of City government. There are five revenue sources that comprise 79% of total General Fund revenue: property tax (including the motor vehicle in-lieu amount), sales tax (including the Measure O local 1% tax), transient occupancy tax (TOT), municipal services tax, and business license tax.



The City's ability to maintain General Fund revenue consistent with inflation and other increasing pressures on spending has been severely limited by various voter initiatives over the last 20 years. This trend began in 1979 with Proposition 13, and continued with Proposition 218. The effects these voter initiatives have had on the City's General Fund have been further compounded by the State's shift of local property tax revenues away from cities to school districts (Educational Revenue Augmentation Fund, or ERAF) and the State General Fund.

These past revenue take-aways and the structure of the local economy have led the City to rely on local option revenues: the Measure O sales tax, the Municipal Services Tax, the Park Tax, the Construction Tax and the Public Safety Fee. These sources either preceded Proposition 13 in 1978 or received subsequent voter approval. These revenues represent approximately 26% of the combined total of local option revenues (whether in the General Fund or other funds) and the other "standard" General Fund revenues.



The projection of revenues into the future is based on past performance and analysis of actual current private and public sector activity. This includes such private sector activities as housing trends, property turnover and business growth; and public sector developments

such as policy shifts at the local, state and federal levels. Revenue projections are inherently dependent on a number of assumptions, which vary by revenue source. The major assumptions used to project the General Fund revenues in the Financial Forecast are described below.

Tax Rates – All tax rates are assumed to be maintained at current levels, although for Measure O sales tax this will require voter approval. A local sales tax rate of 0.5% originally approved in 2004 was renewed by voters in June of 2010 and was set to expire in June 2016. In June 2014 voters approved Measure O, which increased the local rate to 1.0%. This tax expires on December 31, 2020, unless renewed prior to that time. The impact of retaining versus losing this tax will be shown at the end of this section.

Recessions – Nobody has a perfect crystal ball when it comes to predicting recessions, but they are inevitable, and the City needs to be assured that its finances can withstand them. The forecast assumes a moderate recession (18 months of adverse impact on revenues) starts in FY20/21, and reoccurs on a 7-year cycle thereafter (the average time between recessions since 1927). A reduction of 3% in property tax growth and 7.5% in sales tax growth (from pre-recession annualized growth levels) is assumed in FY20/21 and FY21/22, with a 3-year recovery period thereafter. In selecting this recession timing the City considered the following:

- In its analysis of the Governor's FY19-20 budget, the California Legislative Analyst's Office prepared a "recession scenario" assuming a recession beginning in the third quarter of 2020, based on the "moderate" recession scenario of Moody's Analytics.
- Two-thirds of business economists polled in September 2018 saw a recession starting by the end of 2020.
- The Anderson School of Management at UCLA in March 2019 anticipated a slowing national economy and "signs of its weakening will likely be everywhere by year's end."
- The past six recessions have occurred after an inversion of the yield, and the latest full inversion (the first since the Great Recession) occurred in March 2019. According to thebalance.com: "When a yield curve inverts, it's because investors have little confidence in the near-term economy. They demand more yield for a short-term investment than for a long-term one. They perceive the near-term as riskier than the distant future. They would prefer to buy long-term bonds and tie up their money for years even though they receive lower yields. They would only do this if they think the economy is getting worse in the near-term."

The recession impact assumed in the forecast is much less than under the recent Great Recession, so a more pronounced economic downturn would result in lower revenues. The budget model allows staff to simulate a range of economic outcomes in terms of timing and magnitude, to test the sustainability of any given forecast.

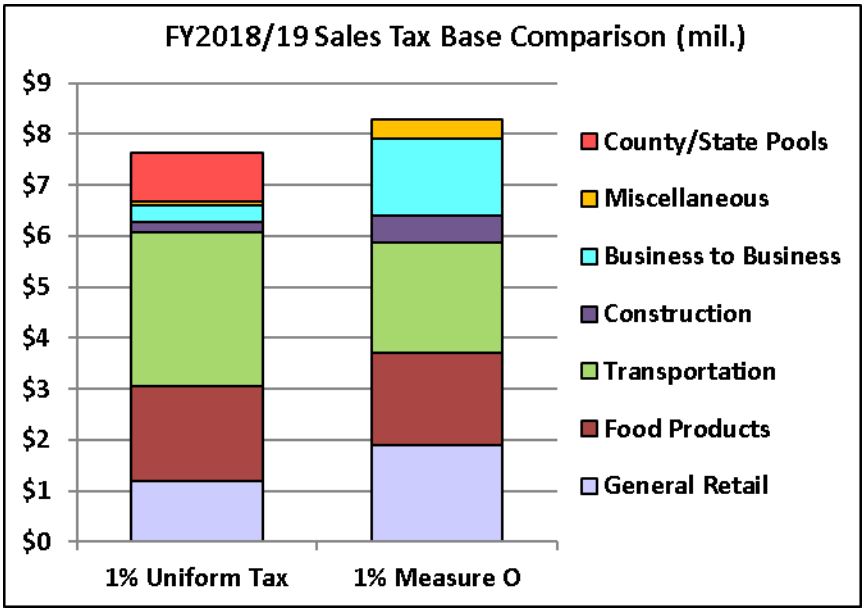
Property Tax – The State Constitution sets the base property tax rate at 1% of assessed value. Property values are limited to 2% growth except when property is transferred or newly constructed. The City receives approximately 18% of the property tax generated in Davis. Property tax growth is determined by the Proposition 13 inflator, changes in ownership, and new construction. It is assumed that 96% of existing parcels will grow at the 2% inflator, that 4% of parcels will change ownership and increase an average of 40%, and that new construction will occur as projected by the Community Development Department. A total of 2,078 new housing units, mostly multi-family, are projected to be issued building permits from FY18/19 through FY26/27, plus $110.6 million in non-residential new construction (most of which involves three new hotels).

New Housing Units:	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Nishi Development	0	0	0	140	140	140	140	140	0
WDAAC Development	0	0	0	81	77	76	76	74	0
All Other	80	79	30	460	225	30	30	30	30
Total New Units	80	79	30	681	442	246	246	244	30
Non-Res AV/year	$6.4M	$26.9M	$6.8M	$21.1M	$7.2M	$18.8M	$7.6M	$7.8M	$8.1M

Future growth assumes 30 housing units and around $8 million in non-residential growth annually. The compound annual growth rate (CAGR) of total property tax revenue from FY18/19 through FY37/38, including recessions, is 3.66%.

Sales Tax – Revenues from the 1% Bradley-Burns sales tax rate are derived from the tax imposed on sales of goods and services on a point-of-sale basis within the City. The Measure O transactions and use tax of 1% is based on the actual location of the transaction, which for motor vehicles and many business-to-business sales, may occur outside of the City. Thus, the tax base for each tax is different, and although the tax rates are both 1%, they produce different levels of revenue, as shown in the chart below. Near-term sales tax growth is based on a projection by Avenu Insights, the City's sales tax auditor, by business sector through FY20/21. Growth thereafter is at the average annual rates (pre-recession) shown to the right. The CAGR for total sales tax revenue (including Measure O) from FY18/19 through FY37/38, including recessions, is 2.40%.

Sector	City 1%	Measure O
General Retail	2.00%	3.00%
Food Products	2.40%	3.00%
Transportation	2.00%	3.00%
Construction	2.40%	3.00%
Business	4.00%	3.00%
Miscellaneous	0.00%	0.00%
County Pool	3.00%	N/A
Total	2.31%	2.95%



Transient Occupancy Tax – The TOT, or hotel tax, applies to rentals of less than 30 days at hotels, or at vacation rentals such as arranged through VRBO or Airbnb. The tax rate was increased from 10% to 12% by Measure B at the June 2016 election. The average annual growth rate pre-recession is 3.0% before the addition of three new hotels that have secured planning approvals from the City. These hotels are projected to add a net of 327 rooms during fiscal years 20/21, 22/23 and 24/25. Assuming nationwide average room rates for these chains, a 70% occupancy rate and a 10% substitution effect (loss of business from current hotels), these three establishments are projected to add $1.4 million in annual TOT revenue. Market forces may affect the timing and revenue generation from these new hotels.

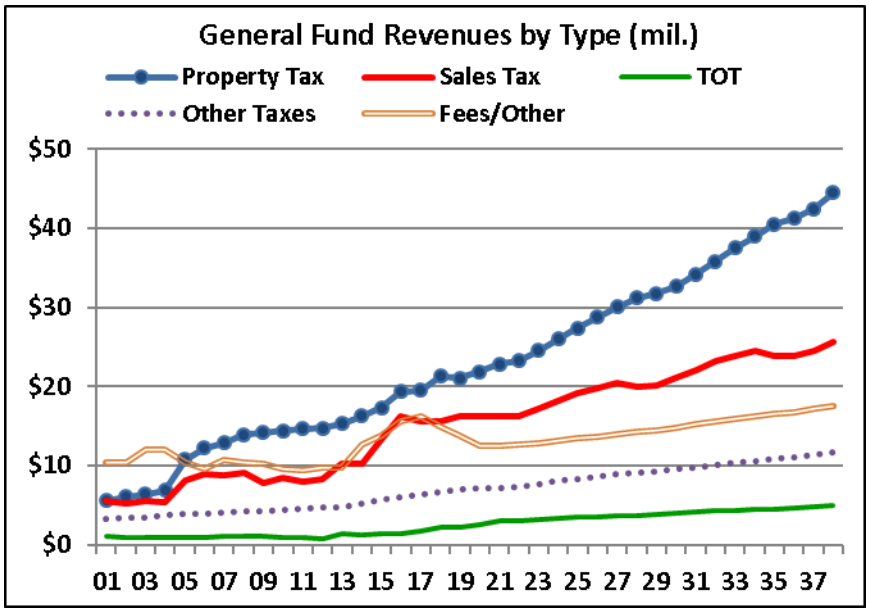
Municipal Services Tax – This tax was adopted by local voters in 1986. The tax paid by residential property owners is charged primarily per dwelling unit, and by commercial

property owners primarily on building square footage. Average annual revenue growth is projected at 3%.

Business License Tax – This tax is imposed on gross receipts of businesses licensed to operate in the City. The tax rate varies depending on the business enterprise. Average annual revenue growth (pre-recession) is projected at 2%.

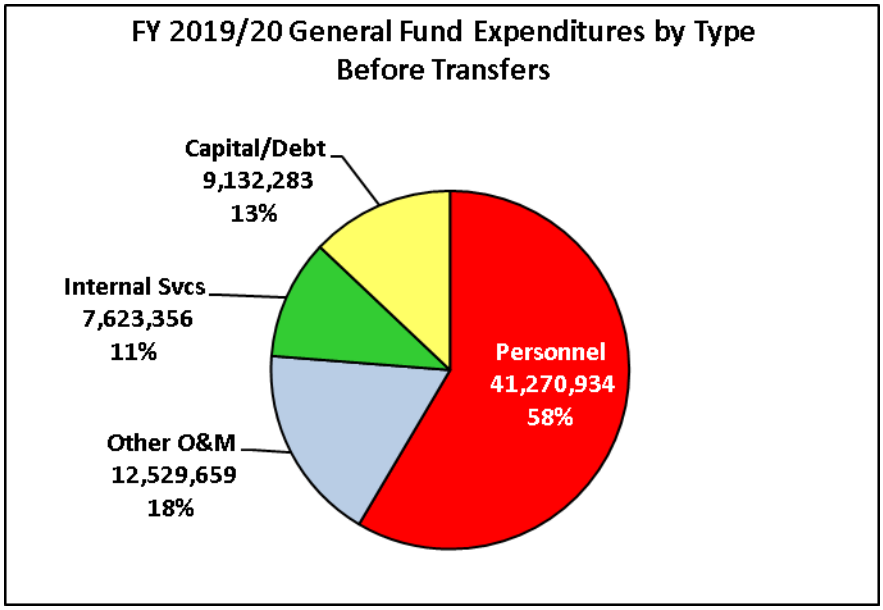
Other Revenue – Other revenue sources include user fees, permits, fines, rentals, the property transfer tax, franchise payments, interest income and grants. Interest income assumes a 1.5% return on fund balance. Grants are volatile and not within the City's ability to control. The property transfer tax varies with the strength of the housing market. The CAGR for other revenue, including recessions, is 1.2%.

The following chart shows the historical and forecasted levels of the property tax, sales tax, other taxes (including the TOT) and fees/other revenue. The CAGR for all revenues from FY16/17 to FY36/37 is 2.62%, including recession impacts.



General Fund Expenditures

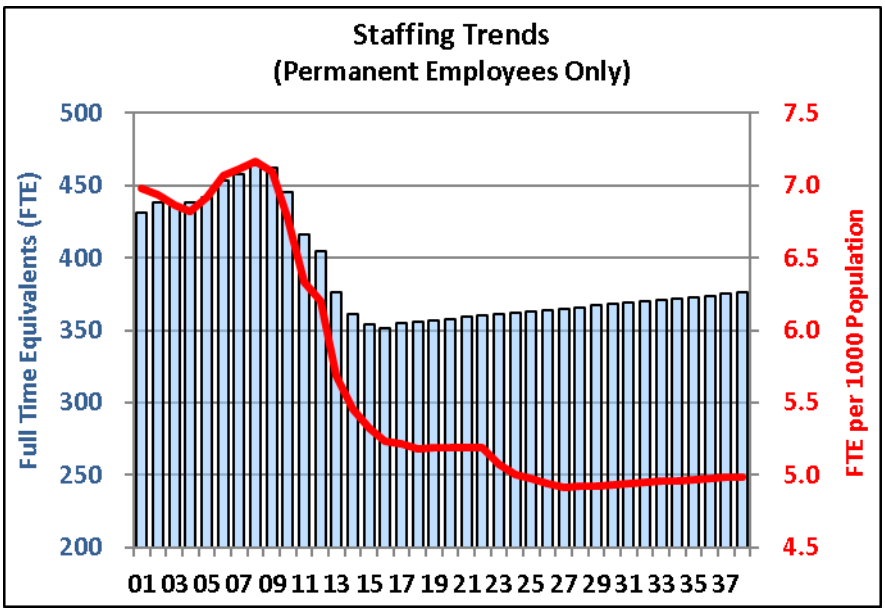
The expenditure baseline for the Financial Forecast is the FY19/20 Proposed Budget. The following chart shows budgeted expenditures by type. Most services are provided by City employees, and personnel costs comprise 64% of gross General Fund expenditures (before transfer/reimbursements from other funds).



The key assumptions used to project expenditures in future years are as follows:

Inflation - The Bay Area index for All Urban Consumers has averaged 2.44% over the last 10 years, while a broader composite of US Cities, Western Urban and Bay Area inflation indices has averaged 1.77%. The Federal Reserve maintains 2% as their inflation goal, and this is the inflation assumed in the forecast.

Staffing Levels - The prior and forecasted level of staffing is shown in the following chart. After a slow increase through 2008, staffing cuts required by the Great Recession reduced permanent staffing levels by 119 FTE, or 24%. The forecast includes an allowance for the addition of one full time equivalent (FTE) position annually assuming an average cost total cost of $120,000. The gradual increase in FTE envisioned in the forecast will only restore one-sixth of that post-recession staffing reduction.



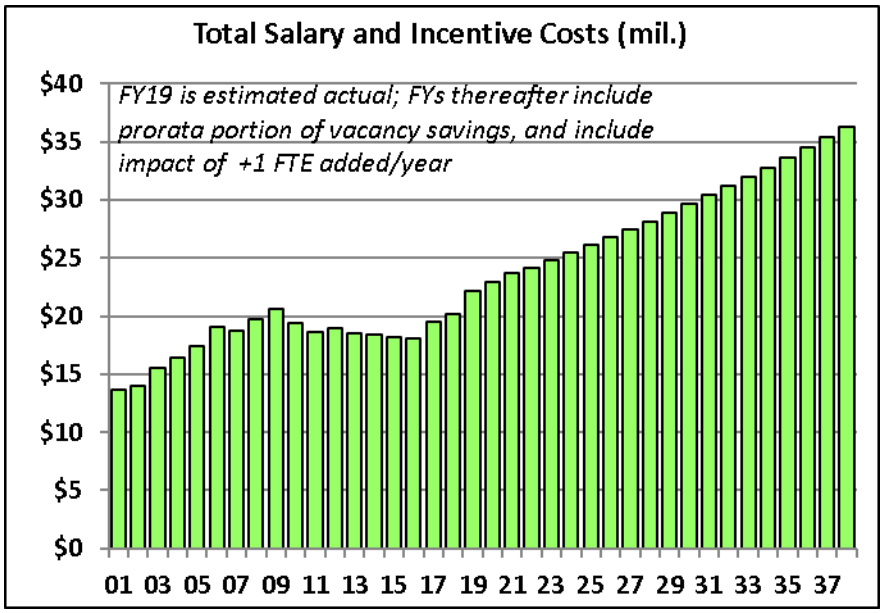
Wage Scale Increases – The baseline forecast starts with the staffing levels contained in the FY19/20 Proposed Budget, using the current employees for filled positions and estimated costs of vacant positions. The budget incorporates a 2.0-2.1% cost of living adjustment into its personnel estimates, depending on the labor unit. The forecast assumes a 2% annual

growth in wages for future years (which could be in the form of across-the-board increases, or the equivalent in targeted increases based on recruiting, retention or equity considerations). Such wage changes are the result of the meet and confer process between the City and its labor groups, so the actual outcome of any given year may vary. It is prudent, however, to build such wage inflation pressure into a forecast that includes anticipated growth in all other revenues and expenses.

Movement Within Wage Scale – The forecast assumes a 0.25% average net annual increase which represents the combination of 5% step increases for eligible employees, and an assumed 8% rate of employee turnover, with a resulting average savings of 15% from new employees hired at a lower pay range. This is an average: depending on the combination of employees leaving and those receiving step increases, the annual impact of movement within the wage scale, based on the average of 40 random trials, ranges from a high of +1.16% to a low of -1.02%. The 0.25% is somewhat above the average of -0.08%, but this is to leave some allowance for reclassification among positions, and the accrual of higher benefit levels as new hires gain in seniority over time.

Vacancy Savings – Both the forecast and City budget incorporate a 3% vacancy savings factor to account for the estimated level of savings that will result from position left unfilled for a portion of the year. Such vacancies are a natural outgrowth of employee turnover. In any given year. The vacancy savings is computed on full-time salaries and benefits, excluding overtime, the PERS unfunded liability payments (which no longer relate to size of payroll), and retiree medical payments. In any given year such savings may exceed 3%, but budgeting a higher savings level could adversely impact services by keeping positions vacant for longer periods.

Salary and Incentive Costs – The following chart shows the prior and forecasted level of salary and incentive payments. Note the accelerated rate of growth pre-recession, compared to the prolonged post-recession slide from FY08/09 to FY15/16. The forecasted CAGR in salaries and incentives from FY15-16 to FY37/38 is 3.12%, which includes adding 1.00 FTE per year. Without the FTE growth the CAGR over the same period would be 2.85%.



Temporary Wages – The growth rate of wages for temporary employees is based on an estimated impact of the minimum wage law which raises the minimum wage from the current $10.50 to $15 in annual increments through January 2022, and CPI growth of 2% thereafter.

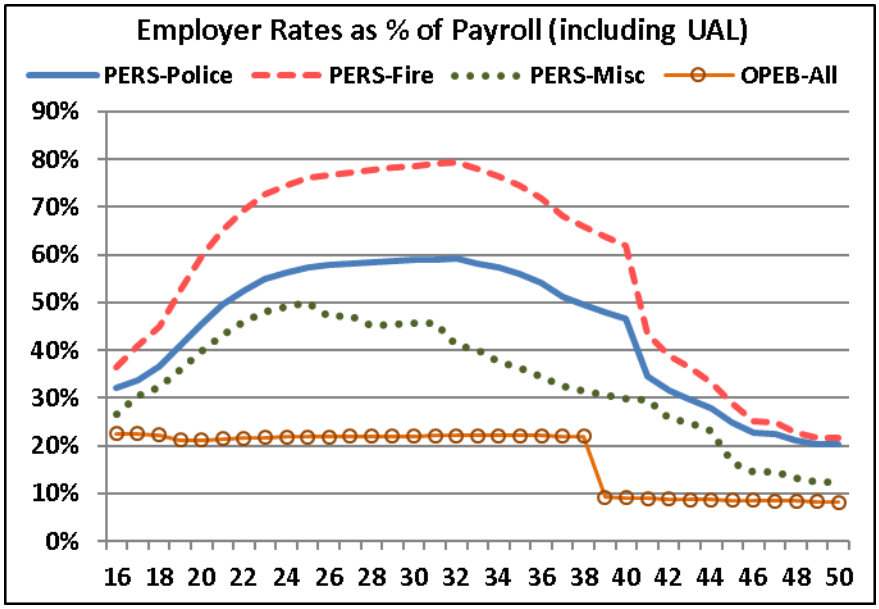
Overtime – Only overtime that is anticipated to be required at the authorized staffing level is budgeted, because if overtime for police and fire jumps due to higher vacancy levels than budgeted, the City will experience additional savings from those vacancies that will typically

offset the added overtime expense. Overtime resulting from fire strike teams (and the reimbursement for such costs) is not budgeted due to the volatility of such activities, and the fact that the added expense and revenue will offset each other in any event. The addition of three firefighters in aimed at reducing overtime. Thus, past actual overtime amounts will seem higher compared to the current budget.

Pension Costs – Retirement rates are set annually by the California Public Employees' Retirement System (CalPERS). Normal costs to pay for current accrued liability are recovered through a percent of payroll. Unfunded actuarial liability (UAL) is recovered through a fixed-dollar payment. These are allocated proportionately by the City to the funds to which employees are charged. Pension costs are a major consideration in the budget planning for all government agencies. CalPERS is in the midst of a planned multi-year escalation in employer rates due to changes it has made in rate-smoothing calculations, amortization of unfunded actuarial liability (UAL) over fixed terms, and mortality improvements for beneficiaries. Arguably these changes should have been made years ago, but despite the adverse impact on local agency budgets, they are prudent actions needed to increase the funded status of the pension system so it can make good on future benefit payments to retirees. CalPERS has also approved a reduction in its discount rate (the assumed annual investment return) from 7.5% to 7.0%. In order to reduce volatility in returns and thus create more stability in employer rates, CalPERS is reducing the risk factor of its investments, and lower risk means lower return. Since CalPERS receives 65% of its income through investments, and what it fails to make through investments must be made up by employers, reducing the discount rate results in significant cost increases to employers.

Every year's valuation will bring new actuarial investment gains or losses, as well as demographic or other assumption changes, which modify prior projected cost factors. Although CalPERS chose not to lower its discount rate at its February 2019 meeting, such action remains an option for the future. The City contracts with GovInvest, Inc. to prepare an independent evaluation of employer rates, and the GovInvest's projections assume a continued slow reduction in the discount rate over time, to 6.5% by 2027 and 6.0% by 2040. An ultimate decline to that level may involve multiple actions by CalPERS over many years, and may also occur over a shorter period of time. The City forecast assumes a reduction in discount rate to 6.0% over 20 years, which provides a cushion against lower CalPERS investment returns in future years.

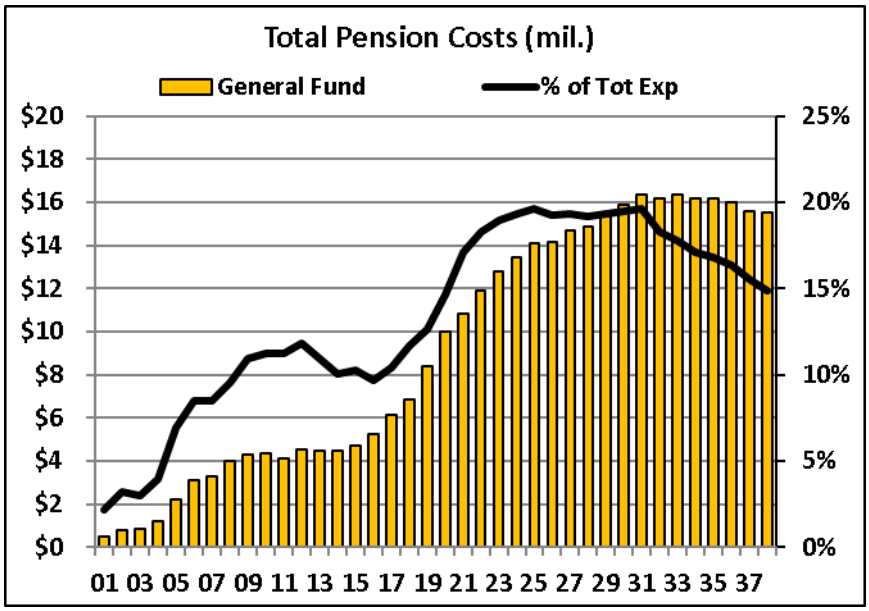
The following chart shows the projected rates for the City's safety, fire and miscellaneous employee plans as a percent of employee payroll. For this comparison the unfunded liability amounts, which are now billed to the City as a fixed-dollar amount, have been converted to a percent of payroll and added to the normal cost rate. OPEB rates for retiree medical benefits are included on this chart as well.



The City has undertaken two actions to reduce pension costs:

- Cost-sharing agreements reached with certain bargaining groups to date save the General Fund around $270,000 annually.
- Paying the UAL amounts to CalPERS up-front instead of monthly qualifies for a discount of approximately 3.5%, which saves around $220,000 annually.

Based on these rates, and net of the City's cost-reduction efforts, the following chart shows the evolution of the General Fund's share of pension costs. Costs were under $500,000 in FY00/01 (back when CalPERS cut employer contribution rates to near zero because of a "surplus" of funds) and have increased 12-fold since then.



Given the projected lowering of discount rate over the next 20 years, at their peak General Fund pension costs will be about double what they are today. The rapid growth in these costs will begin to abate as the various UAL amortization bases (the annual net actuarial gains or losses) are paid off. This will provide some budget relief, but not before the 2030's. Pension costs are projected to approach 20% of total General Fund expenditures. Suffice it

to say that pension costs are very much on the City's budget radar, and will be closed watched on a continuous basis.

Health Benefits – Costs related to health, dental, and life insurance are assumed to grow at an annual rate of 3% throughout the forecast. Health contribution levels are subject to the meet and confer labor negotiating process.

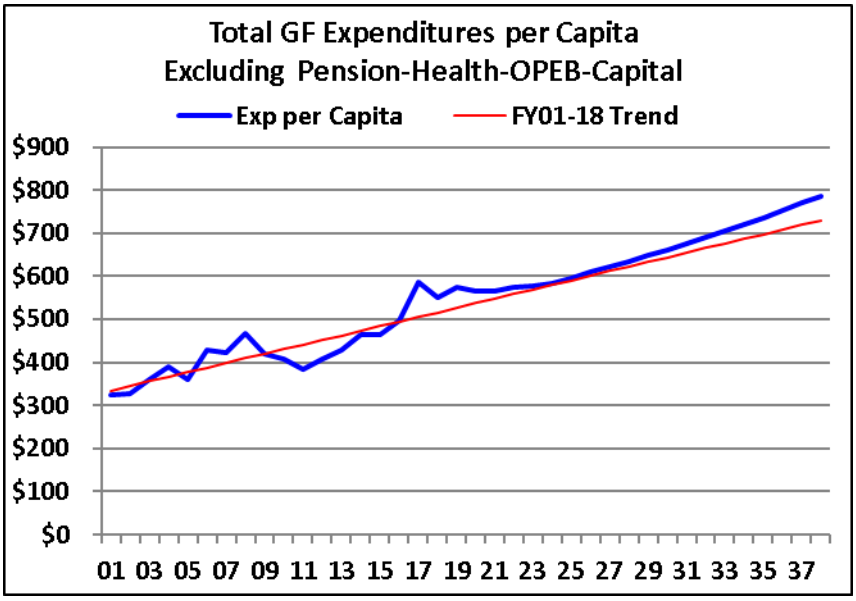
Other Post-Employment Benefits (OPEB) – Statement 45 of the Governmental Accounting Standards Board (GASB) requires public agencies to evaluate and report in their annual financial statements the fully-funded cost of any post-employment benefits such as retiree healthcare. While GASB 45 does not require full pre-funding of post-employment benefits, it effectively highlights the difference between the actual cost of these benefits and the funds typically allocated on an annual pay-as-you-go basis. In this forecast OPEB costs are paid at the full annual required contribution (ARC), which is established in the actuarial reports by John Bartel Associates.

Other Expenses – Non-personnel operation and maintenance costs generally grow at CPI (2%). Debt service costs are fixed at the FY19/20 level. Capital contributions are discussed at length below.

Operating Costs Consistent with Future Community Growth

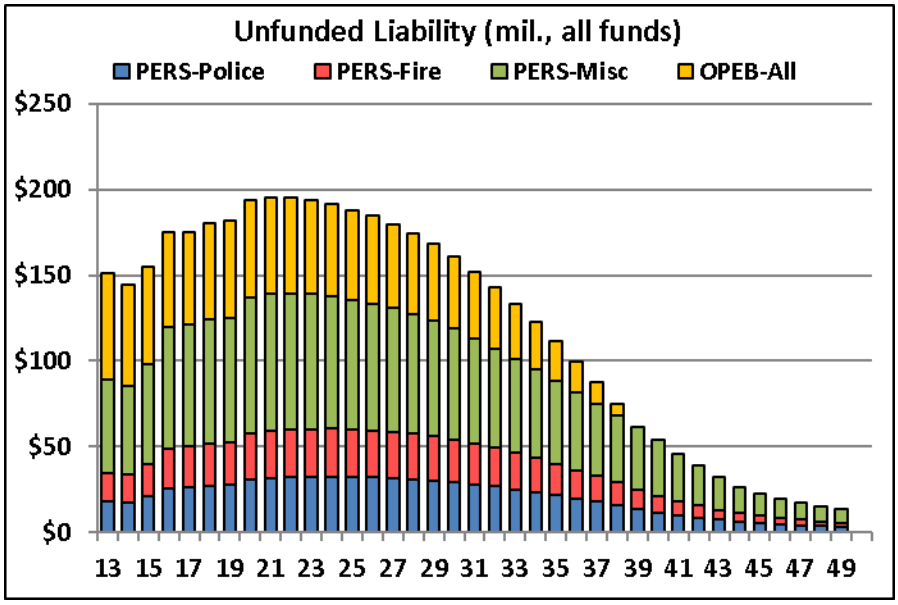
The City seeks to maintain a consistent level of operating expenditures over time, so that it can respond to population and workload increases. When the City reviews major proposed developments, an assessment is made of the revenues anticipated to be generated by the project, compared to the potential expenditures that might be incurred to service the development. The revenue side of the equation is more straight-forward, while the expenditure side is more conjectural.

Another approach is to look at the overall operating expenditure level per capita over time. However, if expenditures were rising just because of fast-growing costs like pension, health and OPEB, which are beyond the City's control, then that is not really an indication of higher or improved service levels. Therefore, for purposes of this comparison, these fast-growing costs are omitted, and only the remaining operating costs per capita are counted. The goal would be to meet or exceed the long-term trend over time, and as the chart below illustrates, the City achieves this objective. Part of the reason for this is that the forecast builds in the expense (and revenue) identified in the development reviews for the large-scale Nishi WDAAC projects. The forecast also incorporates one additional FTE per year, which is a placeholder for the type of marginal growth required over time needed to respond to general population growth and workload demands.



Unfunded Liabilities

The City has pension and retiree medical obligations. In both cases there is a normal cost component (to pay for currently accruing benefits) and an unfunded liability (due to inadequate past funding required of the City to pay for prior accrued benefits). CalPERS has a plan, albeit a long-term one, to pay down these unfunded obligations. In the near-term unfunded liabilities will continue to grow, but then the pay-down of various fixed-term amortization bases will cause the cumulative liability to fall, as shown in the following chart. The City always has the option to prepay certain portions of these obligations, should it choose to dedicate resources to this purpose, instead of, for example, infrastructure maintenance. Such prepayment would reduce the amount ultimately paid, although the savings would be spread over 15 years or more. This will come at an opportunity cost to making improvements today which may significantly cut maintenance and repair costs in the future. Whether or not such a pre-payment is both financially cost-effective and a good policy trade-off would have to be considered on a case-by-case basis. The long-term forecast assumes payments are made in accordance with projected CalPERS rates.



Infrastructure Funding

The City has a major investment in its infrastructure – streets, bike paths, parks and public buildings – which is valued on the city's books at $367.6 million as of June 30, 2018. Although these public investments are depreciated for accounting purposes, the reality is that most of this infrastructure will never be replaced outright at the end of its theoretical "useful life", but rather will be continuously maintained, so that it will be around long after that useful life of 25 to 75 years, depending on the asset. The City has various revenues that are earmarked for infrastructure maintenance and improvements, such as the park tax, the construction tax, and the state gas tax (which was recently increased by SB 1). Development fees for streets, parks, and buildings are dedicated to infrastructure improvements needed to mitigate the effects of new development, but these can't be used to maintain pre-existing infrastructure.

These sources are inadequate to meet total annual infrastructure maintenance needs, so the General Fund contributes toward infrastructure maintenance as well. This was largely not possible before the passage of Measure O in 2014, which increased the City's local sales tax rate from 0.5% to 1.0%; this additional revenue has in part allowed the City to begin contributing to street, bike path, facility and other projects in the past few years. However, the City still faces significant unfunded needs.

Since 2015, the City has focused on identifying these unmet needs and developing a comprehensive plan for funding them:

- **Streets**: NCE's 2015 Pavement Management Program Update projects resurfacing needs of $6-16 million annually over the next 20 years. The key measure is the Pavement Condition Index (PCI), a widespread tool for assessing street condition. The plan directs City efforts in a cost-effective way with the goal of slowly increasing the PCI, and hence overall quality, of the City's street surfaces.

- **Bike Paths**: The same NCE study projected resurfacing needs of $100,000 to $1.9 million annually over the next 20 years, and identified a significant $9.4 million backlog in needed work. A PCI rating is applicable to bike paths as well.

- **Facilities**: Kitchell CEM prepared a maintenance plan for buildings. Smoothing these costs over 20 years results in an annual need of around $1.2 million.

- **Parks**: Kitchell also prepared a parks maintenance plan in 2016, which was recently updated by City staff in December 2017 to identify the following needs totaling an average of $3.58 million annually:

  - Maintenance under current park tax $1.400 million
  - Unmet maintenance needs $0.950 million
  - Urban Forestry program $0.570 million
  - Integrated Pest Mgmt program $0.410 million
  - Special park projects/grant match $0.250 million

- **Traffic Maintenance**: An analysis was prepared by the Public Works Department in 2017 and 2018 which identified the following needs totaling an average of $3.875 million annually:

  - Curb, gutter, sidewalks $2.500 million
  - Striping $0.390 million
  - Signals $0.550 million
  - ADA ramps $0.225 million
  - Street/Path Lights $0.210 million

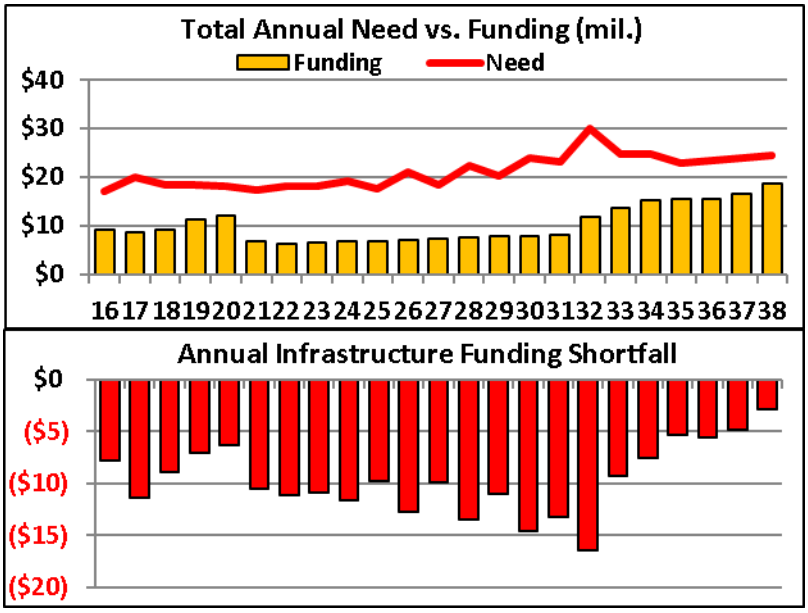
- **Parking Lots**: Public Works identified resurfacing costs averaging $176,000 annually; this would not expand parking, but rather just maintains what is there now.

These costs were used to renew the existing park tax for 20 years at its current $49 per parcel rate (Measure H of 2018). It now has a 2% annual inflator to maintain purchasing power over time. Voter approval was also sought for a new $99 parcel tax to fund street, bike path and traffic maintenance (Measure I), which failed on the June 2018 ballot.

The forecast model places a premium of infrastructure funding. Even though Measure I did not pass, it is assumed that:

- the General Fund continues its $3 million "maintenance of effort" in the funding of transportation projects, and
- to the extent that resources exceed the 15% reserve level, then those resources will be devoted to park and facility infrastructure needs, as well as augmenting transportation-related needs.

The following chart shows the total funding versus need, and the annual shortfall. The cumulative unfunded need peaks in 2034, and declines thereafter. Funding increases in the mid to late 2030's as pension costs begin to fall with the pay down of unfunded liabilities, thus freeing up fiscal capacity in the General Fund to make higher contributions to infrastructure while still maintaining the 15% reserve level. There will always be a trade-off between operating budget needs and infrastructure needs, and this will play out over time in the ongoing budget process.



The following table summarizes the funding plan for infrastructure over the forecast period. It identifies the funding need by infrastructure category, shows the major funding sources, including the General Fund, and shows the resulting funding gap. The allocation in this table by infrastructure category is illustrative only: the ultimate allocation among categories will vary based on annual budget priorities and recommendations from affected Commissions. The key is that the overall funding level achievable is 50% of the identified total need. Given that most cities have not even attempted to identify their comprehensive infrastructure needs, as Davis has done, this is actually a high rate of infrastructure needs funding.

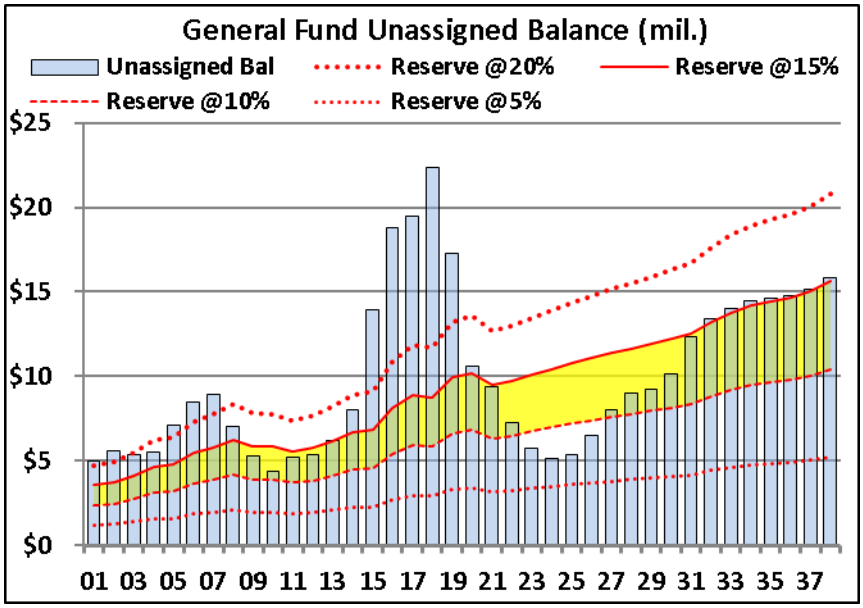
Infrastructure Needs Summary (FY 2015-16 through FY 2037/38)							
($ in Millions)		(1) Streets	Bike Paths	(2) Traffic	Park Maint	Public Facilities	Parking Lots	Totals
Funding Need		182.2	25.2	106.8	100.1	27.0	4.3	445.6
Funding Sources	General Fund	55.6	15.3	26.6	14.8	13.9	0.0	126.1
	Meas H Park Tax	0.0	0.0	0.0	40.6	0.0	0.0	40.6
	SB 1 Gas Tax	27.2	0.0	0.0	0.0	0.0	0.0	27.2
	Cons Tax/Impact Fee	21.6	0.0	0.0	0.0	0.0	0.0	21.6
	Gas Tax/Grants	7.6	0.0	0.0	0.0	0.0	0.0	7.6
Total Funded		112.1	15.3	26.6	55.3	13.9	0.0	223.2
Net Funding Gap		70.1	9.9	80.2	44.7	13.2	4.3	222.4
% Funded		62%	61%	25%	55%	51%	0%	50%

(1) excludes curbs, gutters, sidewalks
(2) includes curb, gutter, sidewalks, signs, striping, pavement marking, signals and street lighting

General Fund Balance

The essence of a budget forecast is the fund balance. Budgets cannot run fund balance deficits, so the financial assumptions selected must result in a sustainable balance over time. The City's reserve policy calls for a 15% reserve, which is close to the Government Finance Officers Association recommendation of a minimum of two month's operating revenues or expenditures (16.67%). Such a reserve will cover the normal ebb and flow of cash balances throughout the year, and help buy time for well-thought out budget recovery plans in the event an economic downturn is greater than projected, or an emergency or other unanticipated expenditure needs exceeds the current budget. The reserve level is 26.3% for FY18/19, is 15.8% for FY19/20, and 14.9% for FY20/21. This decline in balance is due to an expected $8.1M in capital expenditures in FY18/19 and another $8.9 million in FY19/20, which is significantly higher than the $4.2 million average of the prior four fiscal years. Capital expenditures for FY20/21 are projected to be $3.165 million, which is the $3.0 million maintenance of effort for transportation projects and $165,000 for small miscellaneous projects.

The following chart is at the center of the budget model, as it compares the unassigned balance (total balance less non-spendable assets) to 5%, 10%, 15% and 20% reserve levels. (By the time balance falls to 5% an agency needs to put a recovery plan in place to staunch the budgetary bleeding prior to actual deficits resulting.) The fund balance declines steadily until its projected low point in FY23/24, due largely to increased pension costs. Thereafter, fund balance will slowly improve and starting FY30/31, amounts in excess of a 15% reserve are programmed for infrastructure maintenance expenditures.



Alternative Financial Outcomes

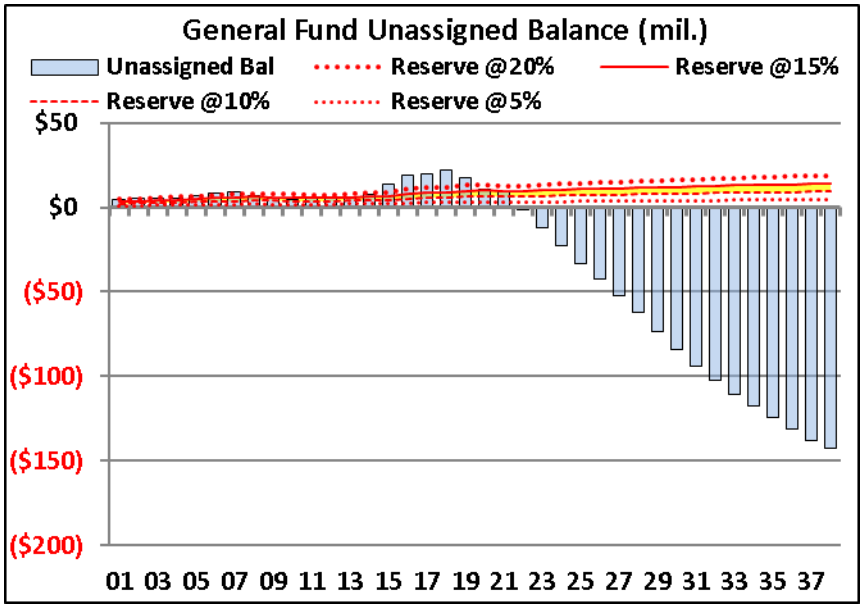
There are a number of alternative outcomes that could improve the Financial Forecast, such as:

- Higher employee vacancy rates (more vacant positions or vacancies for longer periods of time)
- Stronger revenue growth or delayed/lesser recession losses
- CalPERS investment gains above the discount rate
- Stronger economic development than already included in forecast

There are also a number of alternative outcomes that could worsen the Financial Forecast, including:

- PERS investment losses (or additional discount rate cuts)
- Weaker revenue growth from planned hotels or other sources
- More severe recession losses
- Higher annual COLAs approved than the 2% in forecast
- Staffing levels increased beyond proposed levels
- Extreme events (fire, earthquake, weather)

The most significant fiscal variable is whether or not the 1% Measure O sales tax is renewed by the voters prior to its expiration in 2020. The following chart shows what happens if the tax is not renewed, and the current $8.7 million in annual revenue is lost.



Summary

Seeking renewal of the Measure O sales tax will be the primary financial objective of the City in the coming year. Assuming its renewal by the voters, this forecast achieves the following key outcomes:

- Operating service levels are maintained and augmented through the addition of 1.0 FTE position per year, in addition to the projected revenue and expenditures associated with the Nishi and WDAAC projects.
- The $3 million maintenance of effort for General Fund transportation infrastructure spending is met in every year of the forecast.
- Infrastructure funding attains an overall funding level of 50% of identified needs over the life of the forecast, including the large capital expenditures in FY18/19 and FY19/20.
- The City stays current with all of its pension and retiree medical obligations, achieving a projected 52% reduction in total unfunded liability between FY18/19 and FY37/38.
- The City's 15% reserve goal is met in 11 out of 20 fiscal years, with an average reserve level of 13.5%, even after weathering three modest recessions assumed to occur during the next 20 years.

This is a considerable accomplishment, and a testament to the careful budget and policy planning conducted by the staff and City Council. Maintaining an adequate reserve is the best defense against the uncertainty of pension and OPEB discount rate reductions, as well as other economic uncertainties. The City will continue to update the budget model as new information is received, and include the long-term forecast in the annual budget document, to further its goal of maintaining a successful and sustainable financial outlook.

The following pages provide a summary of the 20-year Financial Forecast, assuming renewal by the voters of Measure O.

First Ten Years of Financial Forecast

($ in Thousands)	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Property Tax	$21,422	$22,217	$23,154	$23,576	$24,833	$26,333	$27,713	$29,134	$30,377	$31,537
Sales Tax-Regular (1%)	7,665	7,547	7,547	7,533	7,954	8,374	8,824	9,076	9,379	9,132
Sales Tax-Measure O (1%)	8,545	8,679	8,679	8,718	9,248	9,785	10,360	10,712	11,119	10,895
Transient Occupancy Tax	2,263	2,518	3,022	3,075	3,202	3,334	3,471	3,575	3,683	3,701
Other Taxes/Franchises	7,061	7,177	7,177	7,332	7,716	8,052	8,347	8,622	8,907	9,069
Permits & Fees	7,913	6,969	6,969	7,145	7,326	7,513	7,695	7,849	8,006	8,090
Interest	436	349	349	142	111	87	78	82	99	122
Other Revenue	5,393	5,889	5,205	5,314	5,425	5,540	5,657	5,776	5,898	6,024
Total Revenues	**60,699**	**61,346**	**62,102**	**62,834**	**65,815**	**69,018**	**72,145**	**74,828**	**77,467**	**78,570**
Salaries/Wages	21,289	22,008	22,678	23,149	23,746	24,359	24,987	25,630	26,290	26,967
Part Time (total)	1,632	1,775	1,841	1,915	1,996	2,036	2,077	2,118	2,161	2,204
Overtime	1,554	1,051	1,051	1,073	1,101	1,129	1,158	1,188	1,219	1,250
Retirement	8,375	9,974	10,818	11,883	12,785	13,441	14,098	14,170	14,685	14,869
Health/Cafeteria Plan	4,904	4,869	4,848	5,009	5,175	5,347	5,525	5,708	5,898	6,094
Retiree Medical	4,491	5,152	5,309	4,882	5,034	5,191	5,336	5,484	5,635	5,790
Other Benefits	3,114	3,144	3,253	3,338	3,426	3,517	3,610	3,705	3,802	3,902
Expense Credits	(5,586)	(5,865)	(6,158)	(6,337)	(6,586)	(6,803)	(7,022)	(7,172)	(7,380)	(7,552)
Vacancy Savings	(837)	(837)	(837)	(927)	(951)	(975)	(999)	(1,026)	(1,052)	(1,080)
Subtotal Personnel	**38,936**	**41,271**	**42,804**	**43,984**	**45,727**	**47,242**	**48,769**	**49,806**	**51,257**	**52,444**
Internal Services	7,528	7,623	7,623	7,776	7,931	8,090	8,252	8,417	8,585	8,757
Contract Services	8,121	6,745	6,746	6,881	7,018	7,159	7,302	7,448	7,597	7,749
Other O&M Expenses	6,528	5,805	5,421	5,529	5,640	5,753	5,868	5,985	6,105	6,227
Debt Service	265	214	214	214	214	214	214	214	214	214
Capital-Transportation	6,647	6,416	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Capital-Park/Facility/Other	1,439	2,483	165	169	172	176	179	183	186	190
Development-Related Costs	0	0	0	0	360	731	1,113	1,506	1,911	1,969
Budget Adds/(Cuts)	-	-	-	-	-	-	-	-	-	-
Subtotal O&M	**30,528**	**29,285**	**23,169**	**23,568**	**24,336**	**25,122**	**25,927**	**26,752**	**27,598**	**28,105**
Net Transfers Out/(In)	(3,304)	(2,548)	(2,590)	(2,642)	(2,695)	(2,749)	(2,804)	(2,860)	(2,917)	(2,975)
Total Expenditures	**66,160**	**68,008**	**63,383**	**64,911**	**67,367**	**69,615**	**71,892**	**73,699**	**75,938**	**77,574**
Net Annual	(5,461)	(6,662)	(1,281)	(2,077)	(1,552)	(597)	253	1,129	1,530	996
Beginning Balance	22,863	17,402	10,740	9,458	7,382	5,830	5,233	5,486	6,615	8,144
Ending Balance	**17,402**	**10,740**	**9,458**	**7,382**	**5,830**	**5,233**	**5,486**	**6,615**	**8,144**	**9,140**
Bal as % of Tot Exp	26.3%	15.8%	14.9%	11.4%	8.7%	7.5%	7.6%	9.0%	10.7%	11.8%
FTE (permanent staff)	357	357	358	359	360	361	362	363	364	365

Second Ten Years of Financial Forecast

($ in Thousands)	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38
Property Tax	$32,126	$33,039	$34,594	$36,223	$37,925	$39,379	$40,888	$41,661	$42,852	$44,874
Sales Tax-Regular (1%)	9,116	9,534	9,971	10,429	10,673	10,923	10,633	10,617	10,856	11,356
Sales Tax-Measure O (1%)	10,945	11,516	12,116	12,748	13,126	13,515	13,241	13,303	13,602	14,312
Transient Occupancy Tax	3,766	3,921	4,083	4,251	4,379	4,510	4,533	4,612	4,802	5,001
Other Taxes/Franchises	9,270	9,541	9,819	10,106	10,368	10,637	10,837	11,081	11,405	11,738
Permits & Fees	8,214	8,412	8,615	8,823	9,000	9,180	9,276	9,420	9,646	9,878
Interest	137	140	154	187	203	212	219	221	224	229
Other Revenue	6,152	6,283	6,417	6,554	6,695	6,838	6,985	7,136	7,290	7,448
Total Revenues	**79,727**	**82,386**	**85,769**	**89,321**	**92,368**	**95,194**	**96,612**	**98,051**	**100,677**	**104,836**
Salaries/Wages	27,660	28,371	29,099	29,846	30,612	31,396	32,200	33,025	33,870	34,733
Part Time (total)	2,248	2,293	2,339	2,386	2,433	2,482	2,532	2,582	2,634	2,687
Overtime	1,282	1,315	1,349	1,384	1,419	1,455	1,493	1,531	1,570	1,610
Retirement	15,361	15,860	16,365	16,175	16,325	16,196	16,178	15,987	15,579	15,527
Health/Cafeteria Plan	6,296	6,505	6,720	6,943	7,173	7,411	7,656	7,910	8,172	8,442
Retiree Medical	5,949	6,111	6,277	6,448	6,623	6,802	6,987	7,145	7,304	7,478
Other Benefits	4,005	4,110	4,217	4,328	4,441	4,557	4,676	4,798	4,922	5,050
Expense Credits	(7,765)	(7,983)	(8,206)	(8,347)	(8,535)	(8,692)	(8,868)	(9,023)	(9,156)	(9,339)
Vacancy Savings	(1,107)	(1,135)	(1,163)	(1,194)	(1,225)	(1,258)	(1,290)	(1,324)	(1,362)	(1,399)
Subtotal Personnel	**53,929**	**55,446**	**56,998**	**57,967**	**59,266**	**60,350**	**61,563**	**62,629**	**63,533**	**64,790**
Internal Services	8,932	9,111	9,293	9,479	9,668	9,862	10,059	10,260	10,465	10,675
Contract Services	7,904	8,062	8,223	8,387	8,555	8,726	8,901	9,079	9,260	9,446
Other O&M Expenses	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442	7,590
Debt Service	214	214	214	214	214	214	214	214	214	214
Capital-Transportation	3,000	3,000	3,000	3,656	4,523	5,488	6,254	6,843	7,502	8,438
Capital-Park/Facility/Other	194	198	202	2,829	3,680	4,071	3,286	2,575	2,863	3,976
Development-Related Costs	2,028	2,089	2,151	2,216	2,282	2,351	2,421	2,494	2,569	2,646
Budget Adds/(Cuts)	-	-	-	-	-	-	-	-	-	-
Subtotal O&M	**28,623**	**29,151**	**29,691**	**33,521**	**35,797**	**37,723**	**38,288**	**38,760**	**40,315**	**42,985**
Net Transfers Out/(In)	(3,035)	(3,096)	(3,158)	(3,221)	(3,285)	(3,351)	(3,418)	(3,486)	(3,556)	(3,627)
Total Expenditures	**79,516**	**81,502**	**83,532**	**88,268**	**91,778**	**94,722**	**96,433**	**97,903**	**100,292**	**104,148**
Net Annual	211	884	2,237	1,053	590	472	179	148	385	688
Beginning Balance	9,140	9,351	10,235	12,472	13,525	14,115	14,587	14,766	14,914	15,299
Ending Balance	**9,351**	**10,235**	**12,472**	**13,525**	**14,115**	**14,587**	**14,766**	**14,914**	**15,299**	**15,987**
Bal as % of Tot Exp	11.8%	12.6%	14.9%	15.3%	15.4%	15.4%	15.3%	15.2%	15.3%	15.4%
FTE (permanent staff)	366	367	368	369	370	371	372	373	374	375

First Ten Years of Infrastructure Funding

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Street Needs (1)	$7,500	$7,400	$6,800	$7,100	$7,300	$7,600	$5,900	$8,600	$6,400	$9,800
Other Funding	2,097	2,145	2,090	2,113	2,137	2,161	2,186	2,211	2,236	2,262
General Fund	496	1,776	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(4,907)	(3,480)	(3,210)	(3,487)	(3,663)	(3,939)	(2,214)	(4,889)	(2,664)	(6,038)
Bike Path Needs (1)	1,800	1,200	800	1,000	500	900	600	800	100	200
General Fund	396	2,131	500	500	500	500	500	500	500	500
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(1,404)	931	(300)	(500)	0	(400)	(100)	(300)	400	300
Facilities Needs (2)	1,243	1,236	1,229	1,222	1,215	1,208	1,201	1,195	1,188	1,181
General Fund	1,050	1,080	-	-	-	-	-	-	-	-
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(193)	(156)	(1,229)	(1,222)	(1,215)	(1,208)	(1,201)	(1,195)	(1,188)	(1,181)
Park Needs (3)	3,679	3,753	3,828	3,904	3,982	4,062	4,143	4,226	4,311	4,397
Other Funding	1,382	1,401	1,435	1,471	1,503	1,593	1,664	1,720	1,777	1,836
General Fund	210	537	-	-	-	-	-	-	-	-
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(2,087)	(1,815)	(2,392)	(2,434)	(2,480)	(2,469)	(2,479)	(2,506)	(2,533)	(2,560)
Traffic Needs (4)	4,032	4,112	4,194	4,278	4,364	4,451	4,540	4,631	4,724	4,818
Other Funding	-	-	-	-	-	-	-	-	-	-
General Fund	103	1,004	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(3,929)	(3,109)	(3,194)	(3,278)	(3,364)	(3,451)	(3,540)	(3,631)	(3,724)	(3,818)
Parking Lot Needs (5)	175	179	182	186	189	193	197	201	205	209
General Fund	-	-	-	-	-	-	-	-	-	-
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(175)	(179)	(182)	(186)	(189)	(193)	(197)	(201)	(205)	(209)
Total Surplus(Shortfall)	(12,695)	(7,807)	(10,508)	(11,106)	(10,911)	(11,661)	(9,732)	(12,722)	(9,913)	(13,506)

(1) Street and bike path needs as identified in 2016 NCE report. Funding is from General Fund as selected in budget model plus $130K/year Construction Tax, $800K/year Developer Fees and any grant/other funding as identified in the budget model for Measure I funding.
(2) Facility maintenance needs as identified in 2016 Kitchell report (see Table 3). Does not include replacement costs. Funding is General Fund contribution only as selected in budget model for Measure I funding.
(3) Park maintenance needs as identified by Parks staff (Dec 2015 staff report and updated Kitchell numbers). Funding is current $49 parks tax ($1.4M/year plus selected General Fund contribution).
(4) Traffic maintenance needs updated in 2018 to include curb/gutter/sidewalk costs. Funding is existing General Fund support plus amount selected in budget model.
(5) Maintenance needs of existing lots only, not for additional parking spaces.

Second Ten Years of Infrastructure Funding

	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38
Street Needs (1)	$7,300	$10,700	$9,200	$15,600	$10,000	$9,500	$7,100	$7,100	$7,100	$7,100
Other Funding	2,289	2,316	2,344	2,372	2,401	2,430	2,460	2,491	2,522	2,554
General Fund	1,500	1,500	1,500	1,828	2,262	2,744	3,127	3,421	3,751	4,219
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(3,511)	(6,884)	(5,356)	(11,400)	(5,337)	(4,326)	(1,512)	(1,188)	(827)	(327)
Bike Path Needs (1)	100	100	200	200	200	200	200	200	200	200
General Fund	500	500	500	609	754	915	1,042	1,140	1,250	1,406
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	400	400	300	409	554	715	842	940	1,050	1,206
Facilities Needs (2)	1,174	1,168	1,161	1,155	1,148	1,142	1,135	1,129	1,122	1,116
General Fund	-	-	-	1,181	1,561	1,736	1,380	1,059	1,186	1,685
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(1,174)	(1,168)	(1,161)	26	413	594	245	(70)	64	569
Park Needs (3)	4,485	4,574	4,666	4,759	4,854	4,951	5,050	5,151	5,254	5,360
Other Funding	1,876	1,916	1,958	2,000	2,043	2,087	2,132	2,178	2,225	2,273
General Fund	-	-	-	1,443	1,908	2,121	1,687	1,294	1,450	2,060
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(2,609)	(2,658)	(2,708)	(1,316)	(903)	(743)	(1,231)	(1,679)	(1,579)	(1,027)
Traffic Needs (4)	4,914	5,013	5,113	5,215	5,320	5,426	5,534	5,645	5,758	5,873
Other Funding	-	-	-	-	-	-	-	-	-	-
General Fund	1,000	1,000	1,000	1,219	1,508	1,829	2,085	2,281	2,501	2,813
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(3,914)	(4,013)	(4,113)	(3,997)	(3,812)	(3,597)	(3,450)	(3,364)	(3,258)	(3,061)
Parking Lot Needs (5)	213	218	222	226	231	236	240	245	250	255
General Fund	-	-	-	-	-	-	-	-	-	-
Infra Parcel Tax	-	-	-	-	-	-	-	-	-	-
Surplus(Shortfall)	(213)	(218)	(222)	(226)	(231)	(236)	(240)	(245)	(250)	(255)
Total Surplus(Shortfall)	(11,022)	(14,540)	(13,260)	(16,504)	(9,316)	(7,592)	(5,346)	(5,606)	(4,800)	(2,894)

(1) Street and bike path needs as identified in 2016 NCE report. Funding is from General Fund as selected in budget model plus $130K/year Construction Tax, $800K/year Developer Fees and any grant/other funding as identified in the budget model for Measure I funding.
(2) Facility maintenance needs as identified in 2016 Kitchell report (see Table 3). Does not include replacement costs. Funding is General Fund contribution only as selected in budget model for Measure I funding.
(3) Park maintenance needs as identified by Parks staff (Dec 2015 staff report and updated Kitchell numbers). Funding is current $49 parks tax ($1.4M/year plus selected General Fund contribution).
(4) Traffic maintenance needs updated in 2018 to include curb/gutter/sidewalk costs. Funding is existing General Fund support plus amount selected in budget model.
(5) Maintenance needs of existing lots only, not for additional parking spaces.