

K-12 Land Trust Proposal Projections

Highlights

- *The Executive projects that their Land Trust proposal will increase K-12 distributions by \$1.79 billion over 5 years. The underlying assumptions of their calculations are plausible.*
- *Using slightly different assumptions, the JLBC Staff's estimate of increased distributions during this time period is \$1.72 billion.*
- *Both the JLBC Staff and Executive calculations assume a constant annual growth rate in the Land Trust principal.*
- *Given that actual economic activity will diverge from a constant pattern, the proposal should be further reviewed under various economic scenarios.*
- *The current value of the K-12 Land Trust is \$4.78 billion. Under the Executive Proposal, JLBC Staff projects this value would increase to \$5.18 billion in Calendar Year (CY) 2021, and \$6.30 billion in CY 2026. In contrast, maintaining the existing 2.5% distribution is expected to result in a valuation of \$9.49 billion in CY 2026.*

This report provides an overview of the projections used in the Executive's recent Land Trust proposal. Their plan would increase the annual percentage distribution from the Land Trust to 10% during FY 2017 – FY 2021, followed by 5% during FY 2022 – FY 2026. (See Attachment A) As required by Proposition 118 (2012), the current distribution percentage is 2.5% through FY 2021.

The Executive proposal would increase the annual distributions for each Land Trust beneficiary during the 10-year time period. This report only addresses the change in distributions for K-12 schools.

Background

Currently, the Arizona State Land Department manages approximately 9.2 million acres of state trust land which was granted by the federal government at the time of statehood. State trust land is divided amongst 13 beneficiaries, of which K-12 ("Common Schools") is the largest. As of 2014, K-12 accounts for 8.1 million acres, or 87% of all state trust land.

Certain revenues from state lands, such as the proceeds from the sale of land or royalties from natural products, are deposited into the "permanent fund" for each respective beneficiary. These funds are invested by the State Treasurer, and distributed to beneficiaries according Article 10, Section 7 of the Arizona Constitution.

Approved by voters in 2012, Proposition 118 requires that annual distributions from the various permanent funds for FY 2013 – FY 2021 are to be 2.5% of the average valuation from the proceeding 5 years. After FY 2021, the distributions would revert to the prior constitutional formula, which is determined by the average inflation-adjusted rate of return in the previous 5 fiscal years multiplied by the average market value over the previous 5 years.

To protect the Land Trust principal from the effects of inflation, the 2.5% Proposition 118 distribution rate was set at a level below the historical rate of investment return. Monies earned above the 2.5% distribution were designed to be retained by the Land Trust, to ensure that the principal would not decline in inflation-adjusted terms over time.

Because the Executive proposal would increase the distribution percentage outlined in the Arizona Constitution, it would require voter approval. The Executive estimates assume the policy change begins in FY 2017, pending voter approval.

Increased Land Trust Distributions (FY 2017 – FY 2021)

In calculating the effect of the proposal, the first step in each year is estimating the growth in the Land Trust principal, prior to applying the relevant withdrawal for that given year – 10% or 5% withdrawal for the Executive proposal, or 2.5% under the baseline scenario. The Executive and JLBC Staff make certain assumptions about these growth factors as follows:

State Treasurer Rate of Investment Return – JLBC Staff has assumed a 6.33% investment rate of return, based on the historical rate of return earned by the State Treasurer since the Land Trust was authorized to invest in stocks. (See Table 1).

The Executive estimates use a 6.9% rate of return, based on a third-party consultant forecast conducted for the State Treasurer’s office in 2012. Their forecast was based on the presumption of the Land Trust portfolio being shifted to an allocation of 60% stock investments, which is the maximum percentage allowed under the Arizona Constitution.

K-12 Land Sale Proceeds – JLBC Staff calculations are based on \$133 million of annual deposits into the Land Trust, based on the average proceeds of land sales and royalties during the last 5 fiscal years (FY 2010 – FY 2014). JLBC Staff selected a 5-year average as the basis for land sales projections to avoid issues with a longer historical period. For example, a 10-year average would include sales proceeds from the real estate bubble in the mid-2000’s. A more lengthy period would include unrealistic sales amounts from the early 2000’s, when land prices were significantly lower than now. (See Table 1).

Fiscal Year	Investment Returns	Sale/Royalty Proceeds
2000	4.70%	\$73,581,200
2001	4.39%	56,038,000
2002	(0.38)%	46,747,900
2003	6.09%	77,452,800
2004	8.93%	131,272,800
2005	6.59%	264,354,100
2006	4.68%	264,273,600
2007	12.07%	182,685,600
2008	(2.46)%	238,474,700
2009	(11.41)%	138,486,500
2010	11.53%	91,650,700
2011	16.14%	109,360,300
2012	4.89%	155,572,400
2013	12.94%	228,653,000
2014	<u>16.30%</u>	<u>81,569,800</u>
15 Yr Avg	6.33%	--
5 Yr Avg	--	133,361,200

The Executive assumes \$96 million of annual deposits into the Land Trust, equivalent to the proceeds of land sales and royalties during FY 2014 for the entire Land Trust.

Using these set of assumptions, JLBC Staff and the Executive have comparable estimates of the increased Land Trust distributions that would be generated during the first 5 years of the proposal. *Table 2* lists the estimated distributions under the 10% formula for 5 years, as compared to the existing 2.5% distribution.

<u>Fiscal Year</u>	<u>JLBC Estimate</u>	<u>Executive Estimate</u>
2017	\$294,081,400	\$325,177,600
2018	326,741,300	352,384,400
2019	353,964,200	368,744,300
2020	370,485,100	372,313,800
2021	<u>377,065,200</u>	<u>367,900,400</u>
Total	\$1,722,337,200	\$1,786,520,500

In total, during the first 5 years of the proposal, JLBC Staff estimates increased funding of \$1.72 billion for K-12 schools compared to the Executive estimate of \$1.79 billion. In terms of an average increase per year, JLBC Staff estimates an increase of \$344 million per year, compared to the Executive projection of \$357 million per year.

Long-Term Estimates

In addition to the short-term effects of the proposal under the 10% distribution, JLBC Staff has also analyzed the long-term impact of the Executive proposal. In the second half (FY 2022 – FY 2026), the 5% distribution is projected to generate an additional \$484 million of funding for K-12 schools.

This amount reflects gains from the 5% distribution above the existing 2.5% baseline amounts. Because the 2.5% distribution in Proposition 118 is scheduled to expire in FY 2021, this analysis assumes the continuation of that policy for comparison purposes.

Under the current 2.5% formula, K-12 schools would receive \$1.44 billion over 10 years. Under the 10%/5% Executive proposal, the distribution would be \$3.64 billion. (*See Table 3*)

<u>Fiscal Year</u>	<u>2.5% Baseline Distribution</u>	<u>10%/5% Proposal Distribution</u>	<u>Estimated Net Funding Increase</u>
2017	\$98,027,100	\$392,108,500	\$294,081,400
2018	108,913,800	435,655,100	326,741,300
2019	119,948,600	473,912,800	353,964,200
2020	129,718,500	500,203,600	370,485,100
2021	138,804,400	515,869,600	377,065,200
2022	148,196,700	262,021,400	113,824,700
2023	157,925,500	262,079,900	104,154,400
2024	168,019,300	263,442,900	95,423,600
2025	178,507,000	266,628,000	88,121,000
2026	<u>189,418,100</u>	<u>272,119,300</u>	<u>82,701,200</u>
Total	\$1,437,479,000	\$3,644,041,100	\$2,206,562,100

Land Trust Principal

The greater distribution would affect the size of the K-12 Land Trust principal. It is currently \$4.78 billion as of April 2015. Under the existing formula, the principal is expected to grow to \$9.49 billion by Calendar Year (CY) 2026.

With the 10%/5% distribution, the principal would increase to \$5.18 billion by CY 2021. With the lower 5% distribution in the second half of the proposal (FY 2022 – FY 2026), the principal would continue to grow to \$6.30 billion by CY 2026.

This resulting valuation is \$1.5 billion above the current principal amount, however, it is \$(3.2) billion less than projected under the existing 2.5% distribution formula. The rate of inflation would affect whether the Executive proposal increases or decreases the Land Trust principal in inflation-adjusted (or “real”) terms. For example, if the average annual inflation rate were to be less than 2.75% during the proposal time period, the CY 2026 valuation would represent a real increase from the current Land Trust principal balance.

Table 4 lists the corresponding projected Land Trust balances each year under both 2.5% baseline distribution and the 10%/5% proposal.

Sensitivity Analysis

The JLBC Staff estimates assume that the Land Trust principal will annually increase by exactly the following factors: 6.33% investment returns and \$133 million in land sales and royalties. In reality, the principal will be affected by economic expansions and contractions that will occur during the forecast period.

As a result, the forecasting model should be subject to a sensitivity analysis that varies the annual growth rate from a constant pattern. For example, when analyzing Proposition 118 in 2012, the State Treasurer’s office used a third-party consultant to develop 5 different models of economic growth to measure the impact of the 2.5% distribution rate. The models made projections regarding several economic variables, such as: US Gross Domestic Product, nationwide unemployment, inflation rates, long-term US Treasury interest rates, and investment returns in specific asset classes. Because of the extensive modeling required to forecast a variety of economic data over 10 years, an in-depth sensitivity analysis is beyond the scope of this report.

Calendar Year	2.5% Baseline Valuations	10%/5% Proposal Valuations
2017	\$5,540,115,200	\$5,246,033,800
2018	5,914,890,700	5,275,452,600
2019	6,302,354,700	5,268,475,900
2020	6,704,575,300	5,234,766,800
2021	7,123,170,500	5,183,257,900
2022	7,558,870,500	5,382,336,700
2023	8,012,421,500	5,593,958,700
2024	8,484,588,500	5,817,613,400
2025	8,976,156,000	6,052,240,300
2026	9,487,928,600	6,296,227,800



**DOUG
DUCEY**
Office of the Governor

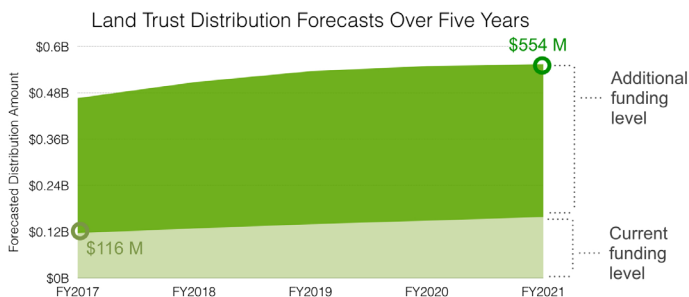
**GOVERNOR DUCEY'S ENHANCED
FUNDING EDUCATION PROPOSAL**

Goal: Get more money - for our kids - into our schools, without raising taxes

Background:

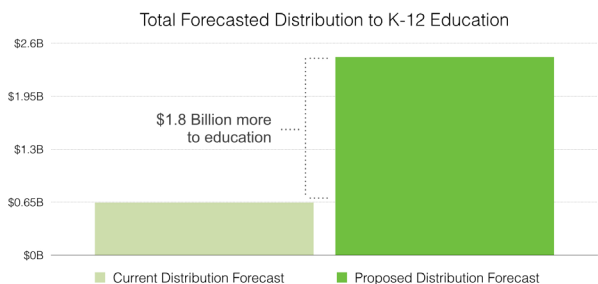
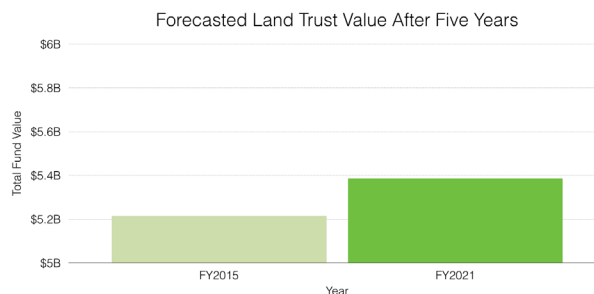
- In 2012, then-State Treasurer Ducey created and championed Prop 118, simplifying how schools receive funds from the state's land trust.
- The percentage set for distribution was 2.5% each year, with 93% of that money going to K-12 education.
- There currently is \$5.15 billion sitting in the land trust.
- At 2.5%, that fed approximately \$80 million this fiscal year to the beneficiaries of the trust. We can do better.

Governor Ducey's plan increases the current distribution formula from 2.5% to 10% over 5 years.



How it affects the land trust fund:

- The amount of money in the land trust fund would increase from our current \$5.15 billion to \$5.39 billion after five years (FY2021).
- That means even distributing more money, we'll still have more money in the fund than we do today.



Under this formula, K-12 schools would receive \$1.8 BILLION more over five years than under the current distribution rate.

Governor Ducey's Enhanced Funding Education Proposal

THE PERMANENT LAND ENDOWMENT TRUST FUND

- The federal government gave the state of Arizona lands as an endowment at the time of statehood.
- When the state sells those lands, the money goes into the Permanent Land Endowment Trust Fund.
- Those funds are held in trust, invested, and distributed to beneficiaries enumerated in the state constitution. (K-12 gets 93%)
- As of 2012 (and the passage of Prop 118), beneficiaries receive 2.5% of the value of the PLETF as an annual distribution. Each beneficiary has their own trust account that determines their proportion of the distribution.

GOVERNOR DUCEY'S PLAN

- Increases the current distribution formula from 2.5% to **10% over 5 years**; then 5% for the next five years (total 10 year plan)
- Under this formula, K-12 schools would receive **\$1.8 BILLION** more over five years than under the current distribution rate.
- Rate would be **5%** after five years – still double the current rate.
- With the change, the land trust fund would stand at **\$5.39 billion**.
 - *NOTE: That means that, even with the higher distribution rate, we'll still have more money in the fund than we do today.*
- This would have no burden on the general fund.
- There would be no tax increase on Arizonans.

FAQ:

Q: How much is in the PLETF today?

A: \$5.15 B

Q: How much was in the PLETF in December 2009?

A: \$2.67 B

Value of Permanent Fund (total for all beneficiaries) over time

As of end of FY

FY Market Value

2014	\$	4,868,540,000
2013	\$	4,149,353,000
2012	\$	3,524,634,000
2011	\$	3,286,678,000
2010	\$	2,721,848,000
2009	\$	2,370,315,000
2008	\$	2,581,135,000
2007	\$	2,446,636,000
2006	\$	2,033,123,000
2005	\$	1,700,051,000
2004	\$	1,311,567,000

Q: How much will be in the PLETF in five years (2021) if we make no changes?

A: ~\$7.58 B

Q: How much will be in the PLETF in five years (2021) under the proposed change? Will this decimate the fund?

A: ~\$5.39 B: **that means that even with the higher distributions, we'll still have more money in the fund in five years than we do today.**

Q: How much will the PLETF distribute over five years without changes?

A: \$692,525,327

Q: How much will the PLETF distribute over five years from earnings under the proposed change?

A: \$2,615,107,773

Q: Over a five-year period how much more will go to K-12 education beyond what it would get at the current 2.5% distribution rate?

A: \$1.79 B

Q: What is the amount and percentage increase in state funding per pupil per year for the next five years from just the increased distribution money?

A: It's approximately 9% per pupil increase that amounts to approximately \$300/year.

*Note: education is also funded by federal & local dollars.

*Note: all state funding numbers as defined by state General Fund equalization dollars.

Q: So, in total, how much money will go into K-12 education from the State of Arizona in the next five years (2016-2021)?

A: We forecast (including inflation, enrollment growth, K-3 Reading, and the new proposal) \$20.35 B

*Note: all state funding numbers as defined by state General Fund equalization dollars.

Q: When will schools (or any beneficiaries) start to get the higher distributions?

A: Tentatively FY 2017, pending voter approval in November of 2016