

# Fund Sustainability Simulation Game

**Essential Question: How does the money of the Permanent Fund get managed and spent?**

**Grade:**

9-12

**Time:**

One class period

**Overview:**

Students will role play management of the Permanent Fund and help make sure it is able to benefit Alaskan's today and in the future, equally.

**Assessment: Can students:**

- Demonstrate the importance of compromise and long-term planning?
- Explain the concept of the POMV rule and why it was enacted?
- Describe the Corporate and Legislative roles and responsibilities concerning the spending of the Permanent Fund?

**Vocabulary:**

Corporation, Legislature, Compromise, Appropriation, Constitution, Statute, Spending, POMV, Savings

## TEACHER INFORMATION AND PROCEDURE

**Prior knowledge for students:**

- Students should have a basic understanding of what the Permanent Fund is, why, and how it came into existence.
- Students should have a working understanding of how the Alaska Permanent Fund is structured.
- Students should understand APFC's role in managing the Alaska Permanent Fund.
- Students should comprehend how APFC makes money for Alaska.

**Materials needed:**

- Class set of budget items (1 per group, laminate optional)

**What to do in advance:**

Review APFC videos, found here: <https://tinyurl.com/AKrenewableresource>

Complete the previous two lessons in the workbook: Create-a-State and The Permanent Fund: A Renewable Financial Resource

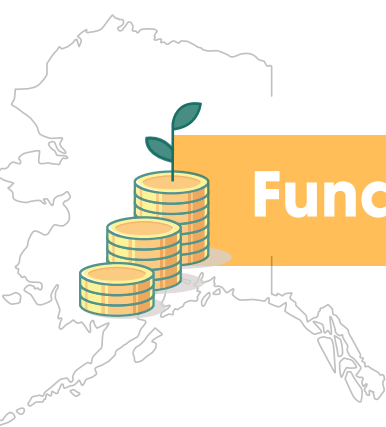
## TEACHING THE LESSON

**Gear up:**

Begin with a brief discussion and overview of the history and significance of the Permanent Fund for the State of Alaska. Overview how money flows into the Fund and how it is invested (review the prior two lessons).

Ask students: How do you think money from the Permanent Fund can be spent? Who decides who spends it? What is that money used for?





# Fund Sustainability Simulation Game

## Explore:

Students will engage in a role-playing activity to simulate how the Permanent Fund is managed to be a sustainable financial resource. Tell students that their school has a reserve savings account started by students years before them that they can use, and it is also invested to keep growing as time goes on. The account was created to ensure that the money in the account would help current students and all students in future years, but the current student council can always spend from the account as they see fit. Investments do well in some years, and not as well in others, but overall, the balance of the account goes up 5% each year.

Tell the students that today, the account sits at \$100,000.

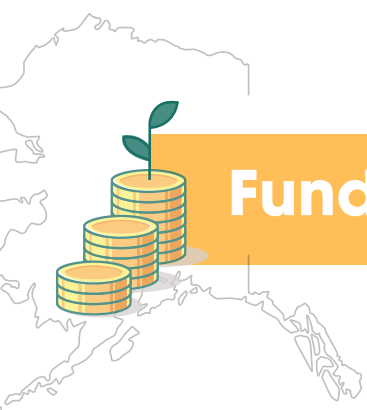
Brainstorm a list of student/school needs that the money could be spent on with the entire class. Divide the list into “annual/today needs” (i.e. prom, yearbook) and “periodic/future needs” (i.e. new textbooks, new technology, supplies, etc.)

Students will be placed in 5-6 groups, depending on class size. They represent the student body. In groups, student have 5-10 minutes to decide on a proposed yearly spending budget. They will be provided a “menu” of annual and periodic needs with associated costs to help them decide on a budget. One representative from each group will share their ideas with the rest of the class.

After hearing all of the proposals, remind students that the savings account has \$100,000 this year, and normally grows at 5% per year. This means that if nothing is spent, it will have \$105,000 in year 1, and because of the power of compound interest it would have \$162,889 by year 10, \$265,330 by year 20, and \$432,194 by year 30. Each group must figure out how many years their reserve savings account will last if the student body spent their proposed budget year after year. Discuss as a whole group: are the budgets they came up with sustainable? Is it fair for the future generation of students?

Tell the students they will get back in their groups again, except this time instead of coming up with a budget proposal, they will come up with a proposed rule for spending each year (e.g. the current student body may only spend 5% of the reserve account each year, except every 5th year 10% may be spent on any major upgrades/purchases). Their rule must consider both the short-term and long-term needs of the student body – while also remembering the fact that the fund only grows at about 5% per year. This time, they are vying to be chosen for student council, and will present their ideas out to the class and teacher. The class will listen to all presentations and vote on which group’s spending rule is the most viable and financially sound, picking a winning group to sit on the student council. They must be able to show mathematically that their spending rule is sustainable (i.e. makes the money reserve last at least 2 years beyond the first round).





# Fund Sustainability Simulation Game

Additionally, students may propose ideas about ways to increase the amount of money in the reserve account through fundraising and sponsorships, so that a bigger yearly spending budget can be maintained. This can be included in their presentations as justification for their spending budget rule.

## Generalize: Ask the students:

- How difficult was it to think about future generations of students to ensure the reserve savings account didn't run out?
- Is it the responsibility of current generations to take care of future generations financially?
- Even if the current generation makes a recommendation to sustainable spending, is it realistic to assume all future generations might follow suit? Why or why not?

Relate the game to how the Alaska Permanent Fund Corporation (APFC) manages the Permanent Fund. Long supported by the APFC Board of Trustees, the Legislature adopted a Percent of Market Value (POMV) rule to guide withdrawals from the Permanent Fund. This formula is designed to give the state a predictable revenue stream while ensuring sustainability by limiting the amount of the draws.

The POMV draw is based on a percentage of the average market value of the Fund for the first five of the preceding six fiscal years. The draw is subject to appropriation and is set in statute at 5%.

## Assess:

### Can students:

Demonstrate the importance of compromise and long-term planning?

Explain the concept of the POMV rule and why it was enacted?

Describe the Corporate and Legislative roles and responsibilities concerning the spending of the Permanent Fund?

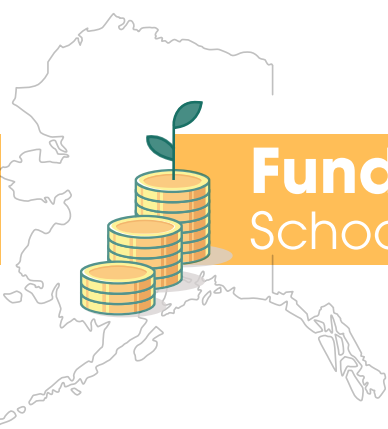
## Extensions, adaptations, and more resources:

Have students play the game for multiple "years" and change the investment growth percentage each year.

Explore current issues in the state legislature regarding the POMV and others that pertain to Permanent Fund and create discussion.

Compare and contrast state governments and have students present on their findings. <https://akleg.gov/>





# Fund Management Simulation Game

## School Budget Menu

Reminder: Your budget currently sits at \$100,000, and grows at roughly 5% interest each year.

### CURRENT/YEARLY NEEDS

Prom	\$5,000
Other dances*	\$2,500
Yearbook	\$2,000
Sports teams and club travel**	\$6,000
Basic classroom supplies and upgrades	\$3,000
Pep rallies & other in-school events*	\$2,000
Individual club fund requests**	\$3,000
School trip to Hawaii	\$15,000

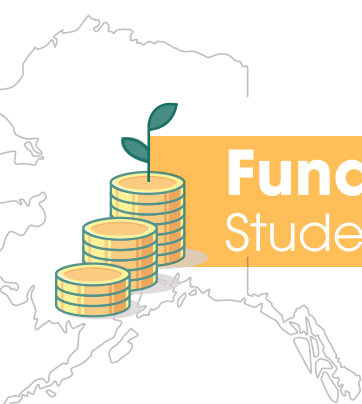
\*per item

\*\*per 5 items

### FUTURE/PERIODIC NEEDS

Many of the same needs as current students as well as large items	
Technology upgrades	\$10,000-\$50,000
School parking lot upgrades (more student parking)	\$5,000
Sports team uniforms and equipment**	\$10,000





# Fund Management Simulation Game

## Student Council Proposed Budget

List your proposed yearly budget items here:

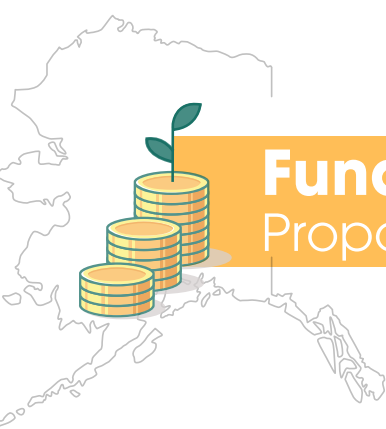
Line Item	Cost

Justification: In a couple sentences describe why you chose the budget you did.

With your above proposed budget, how many years will your reserve account last? Remember that it grows at 5% each year.

Year	Initial	Investment Growth	Spending	Final
1	\$100,000	$(\$100,000 \times 0.05) + 100,000 = \$105,000$	\$20,000	$\$105,000 - \$20,000 = \$85,000$
2	\$85,000	$(85,000 \times 0.05) + 85,000 = \$89,250$	\$20,000	$\$89,250 - \$20,000 = \$69,250$





# Fund Management Simulation Game

## Proposed Budget

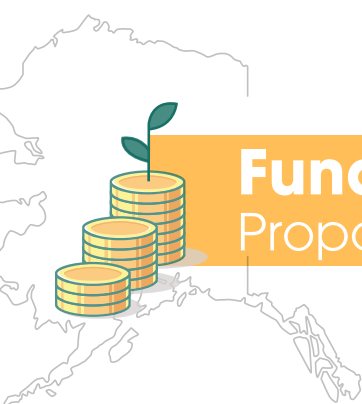
Example:

Year	Initial	Investment Growth	Spending	Final
1	\$100,000	$(\$100,000 \times 0.05) + 100,000 = \$105,000$	\$20,000	$\$105,000 - \$20,000 = \$85,000$
2	\$85,000	$(\$85,000 \times 0.05) + 85,000 = \$89,250$	\$20,000	$\$89,250 - \$20,000 = \$69,250$
3				
4				
5				

Spending budget rule: In your group, come up with a spending budget rule that will be enacted for your annual budget and all would remain in effect for future years as well. The goal is to maintain the reserve savings account indefinitely, while still keeping in mind the needs of today and future students. You will present your rule and justification to the class and to the school "board" (the teachers) with the goal of becoming selected as student council representatives.

Our spending rule is:





# Fund Management Simulation Game

## Proposed Budget

Our budget justification (your fule must ensure money lasts at least 2 years longer than your first round)

Year	Initial	Investment Growth	Spending	Final
1	\$100,000	$(\$100,000 \times 0.05) + 100,000 = \$105,000$		
2				
3				
4				
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8				
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