INTRODUCTION
Depreciation represents a systematic allocation of the cost of a fixed asset that is in service over its estimated life. Depreciation has no direct effect on cash. Depreciation is simply an allocation of the historical cost (if purchased) or the fair market value (if received by donation or seizure) of the asset.

Depreciating assets supports three primary objectives:

- **Comprehensive Annual Financial Report (CAFR)** – To produce and publish an audited CAFR, Idaho must depreciate assets in accordance with Generally Accepted Accounting Principles (GAAP).
- **Grant Management** – The Office of Management and Budget (OMB) Circular A-87 requires certain assets to be depreciated over their useful life, as opposed to charging the entire cost to the grant at the time of purchase.
- **Budget Estimates** – Reflecting assets net of accumulated depreciation may aid agency personnel in budgeting for future replacement of capitalized assets.

An example of a depreciation journal entry is:

<table>
<thead>
<tr>
<th>Depreciation Expense</th>
<th>$2,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated Depreciation</td>
<td>$2,000</td>
</tr>
</tbody>
</table>

CALCULATING DEPRECIATION
To calculate depreciation, three pieces of information are used:

- **Depreciation Base** – The depreciation base is usually the historical cost of the asset net of any positive adjustments and negative adjustments.
  - Positive adjustments usually reflect improvements.
  - Negative adjustments may be partial dispositions, reductions due to casualty loss, accumulated depreciation, and salvage value.
- **Useful Life** – The useful life of an asset is an estimate and represents the number of years the asset is expected to be in service. The depreciation base is allocated over the useful life.
- **Depreciation Method** - Depreciation methods represent the mechanism for allocating the cost of the asset to each accounting period. The State of Idaho uses time-based depreciation methods.

**TIME-BASED DEPRECIATION**

Time-based depreciation allocates the cost of the asset based on time. Each time-based depreciation method requires an adopted convention. The convention determines how the asset will be depreciated in the year the asset is acquired. For instance, if the entity adopts a full-month convention, then depreciation will be calculated for the entire month in the month of acquisition. There are numerous conventions relating to months, quarters, and years - it is up to the reporting entity to determine which method to use.

Statewide capitalized assets are depreciated using the full-month convention and the straight-line depreciation method.

The following time-based depreciation methods are acceptable:

- **Straight-Line** – This method allocates an equal amount of the cost of an asset to each time period within the useful life of the asset.
- **Double-Declining-Balance** – This method is an accelerated straight-line calculation. Twice the straight-line rate is determined and multiplied each year by the book value of the asset.
- **Sum-of-the-Years’-Digits** – This method divides the number of time periods remaining by the sum of the total number of time periods. For example, the year one allocation rate of a five-year asset would be 5/15ths (33%) and the year two rate would be 4/15ths (27%) (the denominator is the sum of the years of the useful life.).

**GOVERNMENTAL FUND TYPES**

Governmental fund types focus on the flow of current financial resources, so the entire cost of a fixed asset is expensed through the fund’s operating statement in the period the asset is purchased. Accordingly, no depreciation allocation is required in future periods.

Depreciation is not recorded in a governmental fund statement. However, the asset and related depreciation are recorded in the government-wide statements and are subject to the conventional accounting standards with respect to the depreciation method, estimated economic life, and estimated salvage value.

**PROPRIETARY FUND TYPES**

Proprietary fund types focus on the flow of economic resources, so the entire cost of a fixed asset is capitalized in the fund and allocated to the periods of service through depreciation.

If an asset was acquired by donation or transferred from another fund, the value of the asset is recorded as a capital contribution in the proprietary fund.
FAS DEPRECIATION PROCESSES

FAS calculates depreciation on all statewide and agency capitalized assets. Depreciation is automatically processed on the last working day of each month. FAS accommodates two types of depreciation processes – one for Statewide Capitalized Assets and one for Agency Capitalized Assets.

For both statewide and agency depreciation, an agency determines the useful life and the salvage value as follows:

- **Useful Life** - The useful life of an asset is determined by the class code in FAS Descriptor Table 02 and automatically entered by FAS. The useful life may be changed by a user when entering the asset into FAS. If changed, the useful life must fall within the range of years defined in FAS Descriptor Table 16.

- **Salvage Value** - The salvage value of an asset is an estimate of what the asset’s value will be when it is disposed of. The salvage value represents the amount of cash you estimate would be received in exchange for the asset or the amount of credit applied to another asset for trade-in purposes. Salvage value is an optional field.

FAS sets the agency capitalization amount and the agency depreciation method as follows:

- **Agency Capitalization Amount** - The agency capitalization amount is defined on the Organization Control Table (25) within STARS. The agency capitalization amount can be any number greater than the inventorial amount, (also defined on the STARS Organization Control Table) and less than or equal to the statewide capitalization amount (defined in STARS Entity Descriptor Table 01).

  Currently the statewide capitalization amount is $5,000 and the inventorial amount is $2,000. You may set the agency-capitalized amount between $2,000 and $5,000. NOTE: If your agency has an agency-capitalized amount set at the old $300 limit, you do not need to change this. Any asset with an acquisition amount greater than or equal to the agency capitalization amount will be depreciated for the agency using the agency defined depreciation method.

- **Agency Depreciation Method** - The agency depreciation method is defined on the Organization Control Table (25) within STARS. Valid agency depreciation methods are straight-line, double-declining-balance, and sum-of-the-years’-digits.

The defined method can be changed when entering an asset into FAS for agency use, but not for statewide use. Statewide capitalized assets (assets $5,000 or more) are depreciated in STARS using the straight-line method, regardless of the depreciation method used at the agency level.

DEPRECIATION OF STATEWIDE CAPITALIZED ASSETS

A statewide capitalized asset is any asset added to FAS with a historical cost or fair market value equal to or greater than $5,000, as set in the STARS Entity Descriptor Table 01. Statewide capitalized assets have an "S" as the capitalization indicator field (CAP IND) on the FAS
Property File. NOTE: FAS calculates and stores depreciation information for all assets with a CAP IND of “S”.

For uniformity in financial reporting on a statewide basis, all statewide capitalized assets will be depreciated within FAS using straight-line depreciation. Land and some intangible assets are not depreciated in accordance with Generally Accepted Accounting Principles (GAAP).

GAAP requires that depreciation expense for proprietary type funds and for governmental funds for government-wide reporting be recorded.

- Proprietary fund types include Enterprise and Internal Service funds.
- Governmental fund types include General, Special Revenue, and Permanent funds.
- Fiduciary fund types include Pension Trust, Investment Trust, Private Purpose Trust, and Agency funds.

DEPRECIATION OF AGENCY CAPITALIZED ASSETS

An agency capitalized asset is any asset added to FAS with a historical cost or fair market value equal to the agency capitalization amount set on the Organization Control Table (25) in STARS.

Agency capitalized assets have an “A” as the capitalization indicator (CAP IND) on the FAS Property File and are depreciated within FAS using the depreciation method selected at the time the asset was entered into FAS. Land will not be depreciated in FAS.

Depreciation entries will not be sent to STARS for agency capitalized assets. The depreciation calculations are for internal management purposes only.

If an asset has a statewide capitalized asset indicator (CAP IND = “S”), both statewide depreciation and agency depreciation will be calculated and tracked within FAS. Only the statewide depreciation for proprietary fund types and the Capital Asset fund (fund 0700) are sent to STARS.

AUTOMATED PROCESSES

Several automated processes will calculate and/or post depreciation:

1. The State Controller's Office determines when depreciation will be run (usually at the end of the month). They will set the depreciation run indicator on STARS Date Descriptor Table 61 to “Y” to initiate the FAS depreciation process during the nightly update. For agency capitalized assets, FAS calculates agency depreciation only. Statewide and agency accumulated depreciation are separate financial fields (buckets) within the FAS Property File.

2. Once the depreciation amount is calculated, FAS generates a FAS transaction code (FAS TC), D01, D02, D03, (current year depreciation), or D06, D07, D08 (prior year depreciation) for each asset depreciated, depending on the class of the asset.
3. The depreciation transaction code will post the amount of statewide depreciation (if applicable) to the STWD ACCUM DEPR field in the FAS Property File (screen S040).

4. The depreciation transaction will also post the amount of agency depreciation to the AGY ACCUM DEPR field in the FAS Property File.

5. Along with posting the depreciation amounts, the FAS depreciation transaction will post the current effective date to the DEPR DT field. Although the FAS depreciation transactions flow through the FAS Hold File, you will not be able to view these transactions. The transactions will be generated and posted within the same night.

6. Additionally, FAS generates STARS transactions for statewide capitalized assets that have proprietary fund sources. The STARS transactions will post during the following night's update process.

The following types of asset records will not depreciate:

- Asset records that have a last depreciation date within the current month.
- Asset records that still reside in the FAS Hold File with a STATUS other than “P”.
- Asset records that have a disposition date, meaning they have been fully disposed.
- Asset records that are neither agency nor statewide capitalized assets.

**STRAIGHT LINE DEPRECIATION**

Straight line depreciation divides the cost of an asset equally among each period of the asset's useful life. This depreciation method is used for calculating statewide depreciation and is one of the available methods for calculating agency depreciation.

The FAS straight line depreciation process is:

1. The depreciation base is calculated. This value is the net of the following financial fields of the Property File: Original Amount, Positive Adjustments, Negative Adjustments, Salvage Value, Dispositions, and either Statewide Accumulated Depreciation or Agency Accumulated Depreciation (depending on whether the calculation is for statewide depreciation or agency depreciation).

2. Once the depreciation base is calculated, it is divided by the total remaining months of the asset’s useful life (U LIFE). The amount calculated represents the straight line depreciation amount for the current month. The In-Service Date is used to calculate the number of remaining months.

**DOUBLE DECLINING BALANCE DEPRECIATION**

Double-declining-balance depreciation is an accelerated depreciation method. It allocates a greater percentage of the asset to early periods and a smaller percentage of the asset to later periods. The basic premise of this method is that as an asset ages, it begins to wear out, thus provides less value.
Double-declining-balance depreciation is twice the rate of straight-line depreciation. For example, if an asset has a useful life of 5 years, the straight-line rate is 20% per year. Since double-declining-balance depreciation is twice the straight-line rate, the rate will be 40% per year.

At a certain point in the asset's life, the double-declining-balance depreciation amount will be less than straight-line depreciation would be. At this point, FAS automatically starts posting straight-line depreciation.

The FAS double-declining-balance depreciation process is:

1. The depreciation base is calculated. This value is the net of the following financial fields of the STARS Property File: Original Amount, Positive Adjustments, Negative Adjustments, Dispositions, and Agency-Accumulated Depreciation. Salvage Value is not considered in determining the depreciation base for double-declining-balance depreciation.

2. The rate is calculated by dividing “1” by the total useful life (U LIFE) and multiplying the value by “2”. The equation is \([2 \times (1/\text{total useful life})]\).

3. The depreciation base is multiplied by the rate, which represents the double-declining-balance depreciation for the period.

4. Straight-line depreciation is then calculated to compare with the double-declining-balance depreciation amount. FAS will post the larger of the two amounts.
   a. FAS calculates the straight-line depreciation base.
   b. The straight-line depreciation base is divided by the total remaining months of useful life.
   c. The result represents the straight-line depreciation amount for the current depreciation period.

5. To choose which depreciation amount will be used for agency depreciation, FAS makes the following comparisons:
   a. If the straight-line depreciation base for the current period (step 4-C) is greater than the double-declining-balance depreciation (step 3), then FAS will post the straight-line depreciation amount (step 4-C).
   b. If the double-declining-balance depreciation amount (step 3) is greater than the straight-line depreciation amount (step 4-C), FAS will post the double-declining-balance depreciation amount.

**SUM OF THE YEARS’ DIGITS DEPRECIATION**

Sum-of-the-years’-digits depreciation is an accelerated depreciation method that allocates a greater percentage of the asset to early periods and a smaller percentage of the asset to later periods. The basic premise of this method is that as an asset ages, it begins to wear out, thus providing less value. Sum-of-the-years’-digits uses a formula to calculate the rate of
depreciation. Unlike double-declining-balance, the rate of the sum-of-the-years’-digits changes from each period and never switches to straight-line depreciation.

The FAS sum-of-the-years’-digits depreciation process is:

1. The depreciation base is calculated. This value is the net of the following financial fields of the STARS Property File: Original Amount, Positive Adjustments, Negative Adjustments, Salvage Value, Dispositions, Agency-Accumulated Depreciation, Gain, Loss, and Statewide Liquidated Depreciation.

2. Once the depreciation base is calculated, FAS calculates the rate.
   a. The numerator of the rate is figured by multiplying the year of the useful life by itself plus “1”.
   b. The rate is then figured by dividing the numerator by “2”. The equation is: \( \frac{N(N+1)}{2} \) where \( N \) equals the asset’s useful life.

3. FAS then multiplies the depreciation base by the rate. The result represents the sum-of-the-years’-digits depreciation amount.