ALLEGHENY TECHNOLOGIES INC

Form 11-K June 08, 2018

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

, ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO \$\text{y}\$ FEE REQUIRED]

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2017

..TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER 1-12001

ATI 401(K) SAVINGS PLAN

(Title of Plan)

ALLEGHENY TECHNOLOGIES INCORPORATED

(Name of Issuer of securities held pursuant to the Plan)

1000 Six PPG Place, Pittsburgh, Pennsylvania 15222-5479

(Address of Plan and principal executive offices of Issuer)

AUDITED FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE ATI 401(k) Savings Plan
As of December 31, 2017 and 2016 and for the Year Ended December 31, 2017
With Report of Independent Registered Public Accounting Firm

ATI 401(K) SAVINGS PLAN Audited Financial Statements and Supplemental Schedule As of December 31, 2017 and 2016 and for the Year Ended December 31, 2017 Contents Report of Independent Registered Public Accounting Firm 1 Audited Financial Statements Statements of Net Assets Available for Benefits Statement of Changes in Net Assets Available for Benefits Notes to Financial Statements 2 Supplemental Schedule Schedule H, Line 4i-Schedule of Assets (Held at End of Year) 9

Report of Independent Registered Public Accounting Firm Allegheny Technologies Incorporated Pittsburgh, Pennsylvania

Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits of the ATI 401(k) Savings Plan (the Plan) as of December 31, 2017 and 2016, and the related statement of changes in net assets available for benefits for the year ended December 31, 2017, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the year ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on the Plan's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Plan in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Supplemental Information

The accompanying schedule of assets (held at end of year) has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the financial statements as a whole. /s/ Schneider Downs & Co., Inc.

We have served as the Plan's auditor since 2013 Columbus, Ohio June 8, 2018

ATI 401(K) SAVINGS PLAN

Statements of Net Assets Available for Benefits

	December 31	
	2017	2016
Investments at fair value:		
Interest in Allegheny Technologies Incorporated Master Trust	\$600,023,722	\$552,505,608
Interest in ATI Company Stock Fund Master Trust	51,939,892	
Interest in registered investment companies	5,172,267	4,422,897
Total investments at fair value	657,135,881	556,928,505
Investments at contract value:		
Interest in Allegheny Technologies Incorporated Master Trust	94,858,611	113,149,854
Total investments at contract value	94,858,611	113,149,854
Notes receivable from participants	20,660,339	18,773,845
Employer contributions receivable	_	936,419
Employee contributions receivable	_	713,216
	20,660,339	20,423,480
Net assets available for benefits	\$772,654,831	\$690,501,839
See accompanying notes.		

ATI 401(K) SAVINGS PLAN

Statement of Changes in Net Assets Available for Benefits

	Year Ended
	December 31,
	2017
Contributions:	
Employee	\$25,029,516
Employer	30,152,664
Rollovers	1,401,086
Total contributions	56,583,266
Interest income on notes receivable from participants	922,420
Investment income (loss):	
Net investment gain from Plan interest in Allegheny Technologies Incorporated Master Trust	99,508,520
Net investment gain from Plan interest in ATI Company Stock Fund Master Trust	16,259,823
Net gain from interest in registered investment companies	878,331
Other loss	(35,202)
Total investment income	116,611,472
	174,117,158
Benefits paid to participants	(92,771,385)
Fees	(52,210)
	(92,823,595)
Net increase in net assets available for benefits prior to transfers	81,293,563
Transfers into plan, net	859,429
Net increase in net assets available for benefits	82,152,992
Net assets available for benefits at beginning of year	690,501,839
Net assets available for benefits at end of year	\$772,654,831
See accompanying notes.	

ATI 401(K) SAVINGS PLAN

Notes to Financial Statements

December 31, 2017

Note 1. Description of the Plan

The ATI 401(k) Savings Plan (the Plan) is a defined contribution plan and is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The Plan's sponsor is Allegheny Technologies Incorporated (ATI, the Plan Sponsor, or the Company). The Plan includes all eligible, non-represented employees of ATI's U.S. operations. The following brief description of the Plan is provided for general information purposes only. Participants should refer to the summary plan description for more complete information regarding eligibility, vesting, contributions, and withdrawals.

Individual accounts are maintained for each participant, reflecting the participant's before-tax and after-tax contributions, rollover contributions, Company matching contributions, and account earnings. The Plan's income and any related administrative expenses are allocated to participant accounts based on the proportionate value of the participant's accounts to the total market value of all accounts.

Amounts up to 80% of a participant's compensation, as defined in the Plan agreement, can be contributed in any combination of after-tax and before-tax contributions for each period, subject to limitations imposed by the Code (\$18,000 for calendar year 2017). Catch up contributions of \$6,000 were available to participants 50 years or older in 2017. Participants are allowed to rollover existing qualified retirement funds into the Plan. The Plan allows participants to direct their contributions, and contributions made on their behalf, to any of the investment options offered by the Plan. Effective in January 2017, participants are restricted to a 10% contribution and investment limit in the ATI Stock Fund. Unless otherwise specified by the participant, contributions are made to the Qualified Default Investment Alternative, which is the Vanguard Target Retirement Fund that most closely matches the participants 65th birthday date.

Employees are 100% vested in their contributions and associated investment performance at all times. In addition, all employees in the Plan are immediately vested in all company contributions, including the company match and non-elective contribution. The non-elective contribution represents 6.5% of eligible earnings while the company match is made at a rate of 50% on up to 6% of the employee's eligible earnings deferral, excluding catch up contributions.

A participant may borrow the lesser of \$50,000 or 50% of his or her account balance. Loans are repayable through payroll deductions over periods ranging up to 60 months for general purpose loans and up to 180 months for residential loans. The interest rate is determined at the issuance of the loans at a rate equivalent to prevailing interest rates charged by a professional lender and is fixed over the life of the note.

Participants, while employed, may withdraw all or a portion of their after-tax contributions and may also withdraw all or a portion of their before-tax contributions in the event of demonstrated financial hardship, as defined by the Plan. After age 59 ¹/2, a participant may withdraw the vested portion of their account.

Participants with account balances greater than \$1,000 are not required to take a distribution upon termination. Participants making hardship withdrawals are not permitted to contribute to the Plan for 6 months after the date of the hardship withdrawal.

Payments of benefits are available by request upon termination due to retirement, disability, death, or other voluntary or involuntary termination of employment. Distributions can only be made in the form of a lump sum.

All expenses incurred in the administration of the Plan, including those charged by the Plan's trustees are paid by the Plan, except as paid for or reimbursed by the Company. Through June 30, 2017, Mercer Trust Company was the Plan's trustee. Effective July 1, 2017, the Plan's trustee for the Company stock fund is Benefit Trust Company and the Plan's trustee for all other Plan assets is AON Trust Company. In conjunction with this transition, there was a net transfer into the Plan from the The ATI Retirement Plan, another ATI sponsored plan, primarily to combine account balances for employees who maintained balances in both the Plan and the ATI Retirement Plan into one account balance in their currently enrolled plan.

Note 2. Significant Accounting Policies

Use of Estimates and Basis of Accounting

The preparation of financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements, accompanying notes and supplemental schedule. Actual results could differ from those estimates. The financial statements are prepared under the accrual basis of accounting.

Investment Valuation

The investments in master trusts, representing the Plan's interest in the net assets of these master trusts, are stated at fair value, or, for fully benefit-responsive investment contracts, at contract value. Contract value is the relevant measurement attributable to fully benefit-responsive investment contracts, because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The contract value represents contributions plus earnings, less participant withdrawals and administrative expenses. The assets of the master trusts, as well as income/losses, are allocated among the participating plans by assigning to each plan those transactions (primarily contributions, benefit payments, and plan-specific expenses) that can be specifically identified and by allocating among all plans, in proportion to the fair value of the assets assigned to each plan, income and expenses resulting from the collective investments of the assets of the master trusts.

Payment of Benefits

Benefits are recorded when paid.

Notes Receivable from Participants

Notes receivable from participants represent participant loans that are recorded at their unpaid principal balance plus any accrued but unpaid interest. Interest income on notes receivable from participants is recorded when it is earned. Related fees are recorded as administrative expenses and are expensed when they are incurred. No allowance for credit losses were recorded as of December 31, 2017 or 2016. If a participant ceases to make a note repayment and the plan administrator deems the note to be a distribution, the note receivable balance is reduced and a benefit payment is recorded.

Note 3. Investments

Certain assets of the Plan, along with the assets of other ATI sponsored plans, are part of the master trusts. The Plan also permits self-directed investments in registered investment companies that are maintained in accounts separate from the master trusts. Through June 30, 2017, certain assets of the Plan were commingled in the Allegheny Technologies Incorporated Master Trust with the assets of other ATI sponsored defined contribution plans for investment and administrative purposes. Effective July 1, 2017, assets invested in Company stock were moved to the ATI Company Stock Fund Master Trust in which assets of the Plan are commingled with the assets of another ATI sponsored defined contribution plan for investment and administrative purposes. All remaining assets of the Plan remained in the Allegheny Technologies Incorporated Master Trust.

The following table is a summary, at fair value, of the net assets of the master trusts by investment type as of December 31, 2017 and 2016:

,	2017		2016		
	Master Trust Balances	Plan's Interest in Master Trus Balances	Master Trust	Plan's Interest in Master Tru Balances	
Allegheny Technologies Incorporated Master Trust:					
Common collective trusts	\$543,337,806	\$384,809,131	\$489,368,94	4\$343,657,311	
Registered investment companies	270,960,966	210,489,658	216,426,850	167,666,711	
Corporate common stock			72,658,442	40,684,637	
Other	7,528,354	4,724,933	713,945	496,949	
Total investments at fair value	\$821,827,126	\$600,023,722	\$779,168,18	1\$552,505,608	;
Plan's interest in master trust		73	%	71	%
ATI Company Stock Fund Master Trust:					
Corporate common stock	\$91,616,341	\$51,581,756	\$ —	\$—	
Other	\$636,100	\$358,136	\$ —	\$—	
Total investments at fair value	\$92,252,441	\$51,939,892	\$ —	\$—	
Plan's interest in master trust		56	%		%

The following table is a summary, at contract value, of the net assets of the Allegheny Technologies Incorporated Master Trust by investment type as of December 31, 2017 and 2016:

2017 2016

Plan's Plan's Interest
Master Trust Interest in Master Trust in Master
Balances Master Trust Balances Trust
Balances Balances Balances

Allegheny Technologies Incorporated Master Trust:

Net appreciation in fair value of investments

 Synthetic investment contracts
 \$152,041,371\$94,858,611
 \$150,219,352\$95,949,841

 Guaranteed investment contracts
 —
 26,928,391
 17,200,013

 Total investments held at contract value
 \$152,041,371\$94,858,611
 \$177,147,743\$113,149,854

Investment income attributable to the master trusts for the year ended December 31, 2017 was as follows:

Allegheny ATI
Technologies Company
Incorporated Stock Fund
Master Trust
\$131,669,350 \$28,817,638
4,349,528 2,507

Investment income from investments at fair value 4,349,528 2,331 Investment income from investments at contract value 2,796,603 —

Expenses

Administrative expenses and other, net (1,211,589)—

Total investment income \$137,603,892 \$28,820,145

Administrative fees for the ATI Company Stock Fund Master Trust are paid by the Allegheny Technologies Incorporated Master Trust.

Investments accounted for at contract value are held by the BNY Mellon Stable Value Fund (the Fund), which may invest in a diversified portfolio of guaranteed investment contracts including synthetic investment contracts, separate account contracts, cash and cash equivalents, and other instruments that can be carried at book value. All of these assets allow participant-directed transactions to be made at contract value. The assets underlying the synthetic investment contracts may include U.S. Treasury bonds, agency bonds, corporate bonds, residential mortgage backed securities, asset-backed securities, commercial mortgage-backed securities, and common collective trusts. These assets are owned by the Plan. As of December 31, 2017, the Fund had a product allocation of 4% to cash, 26% to fixed maturity contracts and 70% to constant duration contracts.

Interest crediting rates on the contracts held in the Fund are determined at the time of purchase. Such crediting rates are reviewed and may be reset on a quarterly basis.

Typically, the investment contracts in the Fund do not have a stated final maturity, but contracts wrapping individual bonds may have a gradual tapering of duration unless new bonds are purchased within the investment contract. These contracts are referred to as "fixed maturity" contracts, while "constant duration" contracts invest in common collective trusts or actively managed accounts, managed against a stated benchmark or to a targeted duration.

Certain investment contracts in the Fund may provide for adjustment to contract value for withdrawals made prior to termination. If the Plan were deemed to be in violation of ERISA or lose its tax exempt status, among other events, the issuers of the fully benefit responsive investment contracts would have the ability to terminate the contracts and settle at an amount different from contract value.

Certain investments are subject to restrictions or limitations if the Plan Sponsor decides to entirely exit an investment. Investments in registered investment companies, common collective trusts and the Fund may require at least 30 days prior notice to completely withdraw from the investments. The targeted date fund investments held in common collective trusts currently do not require the prior approval of the investment manager if the Plan Sponsor decides to entirely exit these investments, but prior trade date notification is necessary to effect timely securities settlement or

delivery of an investment's liquidation and transfer to another investment. The Plan had no unfunded commitments as of December 31, 2017 and 2016.

Note 4. Fair Value Measurement

In accordance with accounting standards, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The accounting standards establish a three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

Determination of Fair Value

Fair value is based upon quoted market prices, where available. If listed prices or quotes are not available, fair value is based upon models that primarily use, as inputs, market-based or independently sourced market parameters, including yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models may also incorporate transaction details, such as maturity. Valuation adjustments, such as liquidity valuation adjustments, may be necessary when the Plan is unable to observe a recent market price for a financial instrument that trades in inactive (or less active) markets. Liquidity adjustments are not taken for positions classified within Level 1 (as defined below) of the fair value hierarchy.

The methods described below may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. There have been no changes in the methodologies used at December 31, 2017 and 2016.

Valuation Hierarchy

The three levels of inputs to measure fair value are as follows:

Level 1 – Quoted prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Valuation Methodologies

The valuation methodologies used for assets and liabilities measured at fair value, including their general classification based on the fair value hierarchy, include the following:

Cash and cash equivalents – Where the net asset value (NAV) is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy. In certain cases, NAV is a quoted price in a market that is not active, or is based on quoted prices for similar assets and liabilities in active markets, and these investments are classified within Level 2 of the valuation hierarchy.

Corporate common stocks – These investments are valued at the closing price reported on the major market on which the individual securities are traded. Common stock is classified within Level 1 of the valuation hierarchy.

Common collective trust funds – These investments are investment vehicles valued using the NAV, as a practical expedient, provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding.

Registered investment companies – These investments are public investment vehicles valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. Where the NAV is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy.

The following tables present the financial instruments of the master trusts at fair value by caption on the statement of net assets available for benefits and by category of the valuation hierarchy (as described above) as of December 31, 2017 and 2016. The master trusts had no assets classified within Level 2 or Level 3 of the valuation hierarchy. There were no reclassifications of assets between levels of the fair value hierarchy for the period presented.

Master trust assets measured at fair value on a recurring basis:

December 31, 2017	Level 1	NAV (a)	Total
Common collective trusts	\$	\$543,337,806	\$543,337,806
Registered investment companies	270,960,966	_	270,960,966
Corporate common stock	91,616,341	_	91,616,341
Other	8,164,454	_	8,164,454
	\$370,741,761	\$543,337,806	\$914,079,567
December 31, 2016	Level 1	NAV (a)	Total
December 31, 2016 Common collective trusts	Level 1 \$—	` '	Total \$489,368,944
•		` '	
Common collective trusts	\$—	\$489,368,944	\$489,368,944
Common collective trusts Registered investment companies	\$— 216,426,850	\$489,368,944 —	\$489,368,944 216,426,850

(a) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in Note 3 and to the statements of assets available for benefits.

In addition to the Plan's investments in the master trusts, the Plan holds \$5,172,267 and \$4,422,897 in self-directed accounts as of December 31, 2017 and 2016, respectively. These self-directed accounts are invested in registered investment companies and are categorized as Level 1 assets.

Note 5. Income Tax Status

The Plan obtained its latest determination letter dated January 25, 2016, in which the Internal Revenue Service stated the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2017 and 2016, there are no uncertain positions taken or expected to be taken. The earliest tax year open to U.S. Federal examination is 2014.

Note 6. Plan Termination

Although they have not expressed any intent to do so, the employing companies have the right under the Plan to discontinue their contributions at any time and to terminate their respective participation in the Plan subject to the provisions of ERISA. However, no such action may deprive any participant or beneficiary under the Plan of any vested right.

Note 7. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risk such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

Note 8. Party-In-Interest Transactions

At December 31, 2017 and 2016, the Plan held 1,806,448 and 2,133,183 shares, respectively, of common stock of ATI, the sponsoring employer, with a fair value of \$51,581,756 and \$40,684,637, respectively. The shares held by the Plan at December 31, 2017 and 2016 reflect the Plan's interest in the master trusts. During the year ended December 31, 2017, the Plan recorded an investment gain of \$16,259,823 related to its investment in the common

stock of ATI.

ATI 401(K) SAVINGS PLAN EIN: 25-1792394 Plan: 022

Schedule H, Line 4i-Schedule of Assets (Held at End of Year)

December 31, 2017

Description Current Value Participant loans* (4.25% to 9.25%, with maturities through 2032) \$20,660,339 Registered investment companies - Self-directed accounts 5,172,267

^{*} Party-in-interest

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the administrators of the Plan have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

ALLEGHENY TECHNOLOGIES INCORPORATED

ATI 401(K) SAVINGS PLAN

Date: June 8, 2018 By: /s/ Karl D. Schwartz

Karl D. Schwartz

Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer and Duly Authorized Officer)