

ALLEGHENY TECHNOLOGIES INC  
Form 11-K  
June 10, 2016

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  
FEE REQUIRED]  
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2015

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

ALLEGHENY TECHNOLOGIES RETIREMENT 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)

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AUDITED FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE

Allegheny Technologies Retirement Savings Plan

As of December 31, 2015 and 2014 and for the Year Ended December 31, 2015

With Report of Independent Registered Public Accounting Firm

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Allegheny Technologies Retirement Savings Plan  
Audited Financial Statements  
and Supplemental Schedule  
As of December 31, 2015 and 2014 and for the Year Ended December 31, 2015  
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Report of Independent Registered Public Accounting Firm

Allegheny Technologies Incorporated

Pittsburgh, Pennsylvania

We have audited the accompanying statements of net assets available for benefits of the Allegheny Technologies Retirement Savings Plan (the Plan) as of December 31, 2015 and 2014, and the related statement of changes in net assets available for benefits for the year ended December 31, 2015. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2015 and 2014, and the changes in its net assets available for benefits for the year ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

The supplemental information in the accompanying schedule of assets (held at end of year) as of December 31, 2015 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is presented for the purpose of additional analysis and is not a required part of the financial statements but include supplemental information required by the Department of Labor's (DOL) Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 (ERISA). 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 in the accompanying schedule, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the DOL's Rules and Regulations for Reporting and Disclosure under the ERISA. In our opinion, the supplemental information in the accompanying schedule is fairly stated in all material respects in relation to the financial statements as a whole.

/s/ Schneider Downs & Co., Inc.

Pittsburgh, Pennsylvania

June 10, 2016

Allegheny Technologies Retirement Savings Plan  
Statements of Net Assets Available for Benefits

	December 31	
	2015	2014
Investments at fair value:		
Interest in Allegheny Technologies Incorporated Master Trust	\$10,143,217	\$266,368,410
Interest in registered investment companies	609,757	5,114,336
Total investments at fair value	10,752,974	271,482,746
Investments at contract value:		
Interest in Allegheny Technologies Incorporated Master Trust	7,871,098	85,585,481
Total investments at contract value	7,871,098	85,585,481
Notes receivable from participants	411,261	3,228,420
Employer contributions receivable	—	407,083
Employee contributions receivable	—	325,723
	411,261	3,961,226
Net assets available for benefits	\$19,035,333	\$361,029,453
See accompanying notes.		

Allegheny Technologies Retirement Savings Plan  
Statement of Changes in Net Assets Available for Benefits

	Year Ended December 31, 2015
Contributions:	
Employer	\$8,209,352
Employee	8,479,200
Rollovers	306,966
Total contributions	16,995,518
Interest income on notes receivable from participants	124,359
Investment income (loss):	
Net investment loss from Plan interest in Allegheny Technologies Incorporated Master Trust	(6,161,964 )
Net income from interest in registered investment companies	101,626
Other income	4,854
Total investment loss	(6,055,484 )
	11,064,393
Benefits paid to participants	(26,744,434 )
Administrative expenses and other, net	(7,290 )
	(26,751,724 )
Net decrease in net assets available for benefits prior to transfers	(15,687,331 )
Transfers out of plan	(326,306,789)
Net decrease in net assets available for benefits	(341,994,120)
Net assets available for benefits at beginning of year	361,029,453
Net assets available for benefits at end of year	\$ 19,035,333
See accompanying notes.	

## Allegheny Technologies Retirement Savings Plan

Notes to Financial Statements

December 31, 2015

### 1. Description of the Plan

The Allegheny Technologies Retirement 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). 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.

The purpose of the Plan is to provide retirement benefits to eligible employees through company contributions and to encourage employee thrift by permitting eligible employees to defer a portion of their compensation and contribute such deferrals to the Plan. The Plan allows employees to contribute a portion of eligible wages each pay period through payroll deductions subject to Internal Revenue Code (the Code) limitations.

Effective January 1, 2015 all non-represented employees became immediately vested in all company contributions, including 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. This same non-represented group was transferred out of the The Allegheny Technologies Retirement Savings Plan and into the ATI 401(k) Savings Plan effective November 30, 2015.

For represented participants, a company contribution for each hour worked is made to eligible participant accounts. Depending on the individual bargaining agreement, additional hourly contributions and/or a 6.5% non-elective contribution are made to eligible participant accounts. The Plan allows participants to direct their contributions, and contributions made on their behalf, to any of the investment options offered by the Plan. Unless otherwise specified by the participant, contributions are made to the QDIA (Qualified Default Investment Alternative), The Vanguard Target Retirement Fund that most closely matches the participants 65<sup>th</sup> birthday date (e.g. Vanguard Target Retirement 2030 Fund).

Participants are vested immediately in their contributions plus actual earnings thereon. For represented employees, vesting in the Company's contribution varies based on employee group classification and years of service. Participant forfeitures are used to reduce future employer contributions.

Separate accounts are maintained by the Plan Sponsor for each participating employee. Trustee fees and asset management fees charged by the Plan's trustee, Mercer Trust Company, for the administration of all funds are charged against net assets available for benefits of the respective fund. Certain other expenses of administering the Plan are paid by the Plan Sponsor. Participants may make "in-service" and hardship withdrawals as outlined in the plan document.

Active employees can borrow up to 50% of their vested account balances minus any outstanding loans. The loan amounts are further limited to a minimum of \$1,000 and a maximum of \$50,000, and an employee can obtain no more than three loans at one time. Interest rates are determined based on commercially accepted criteria, and payment schedules vary based on the type of the loan. General purpose loans are repaid over 6 to 60 months, and primary residence loans are repaid over periods up to 180 months. Principal and interest payments are made by payroll deductions.

### 2. Significant Accounting Policies

#### Use of Estimates and Basis of Accounting

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

#### Investment Valuation

Certain assets of the Plan have been commingled in the Allegheny Technologies Incorporated Master Trust (the Master Trust) with the assets of various ATI sponsored defined contribution plans for investment and administrative purposes. The investment in the Master Trust represents the Plan's interest in the net assets of the Master Trust, and is stated at fair value or for fully benefit-responsive investment contracts, at contract value. Contract value is the relevant measurement attributable to fully

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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.

Master Trust assets 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 investment of the assets of the Master Trust.

#### 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, 2015 or 2014. 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.

#### Recent Accounting Pronouncements

In May 2015, the Financial Accounting Standards Board (FASB) issued ASU 2015-07, "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)." This FASB pronouncement removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share as a practical expedient. ASU 2015-07 also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share as a practical expedient, and is effective for public businesses beginning after December 15, 2015, with early adoption permitted. ASU 2015-07 requires retrospective application by removing investments measured using net asset value as a practical expedient from the fair value hierarchy in all periods presented. The Plan has elected to early adopt this ASU in the current year and as such, these financial statements have revised disclosures to reflect this adoption.

In July 2015, the FASB issued Accounting Standards Update (ASU) 2015-12, "Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient (consensuses of the Emerging Issues Task Force)." These FASB pronouncements attempt to reduce complexity in employee benefit plan accounting. Such changes include: (1) measuring and presenting fully benefit-responsive investment contracts at contract value; (2) eliminating various requirements for plan investment disclosures, such as net appreciation/depreciation by general investment by type and individual investments that represent 5% or more of net assets; and (3) a practical expedient that permits a plan to measure investments as of a month-end date closest to the plan's fiscal year-end. ASU 2015-12 is effective for the Plan beginning after December 15, 2015, with early adoption permitted and retrospective application required. The Plan has elected to early adopt Parts I and II of this ASU in the current year and as such, these financial statements reflect this adoption.

#### 3. Investments

Certain assets of the Plan along with the assets of various other ATI sponsored plans are part of the Master Trust. The Plan's interest in the net assets of the Master Trust was approximately 2% at December 31, 2015 and 35% at December 31, 2014. The Plan also permits self-directed investments in registered investment companies that are maintained in accounts separate from the Master Trust.

The Plan's approximate share of the various investment types at fair value held by the Master Trust at December 31, 2015 and 2014 was as follows:

	2015	2014
Registered investment companies	2 %	39 %
Common collective trusts	1 %	31 %

Corporate common stock      1 % 27 %

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The Plan's approximate share of the various investment types at contract value held by the Master Trust at December 31, 2015 and 2014 was as follows:

	2015	2014
Synthetic investment contracts	4 %	42 %
Guaranteed investment contracts	4 %	42 %

The following table is a summary, at fair value, of the net assets of the Master Trust by investment type as of December 31, 2015 and 2014:

	2015	2014
Common collective trusts	\$463,917,622	\$426,729,102
Registered investment companies	228,064,975	287,768,013
Corporate common stocks	37,937,779	79,471,712
Other	786,109	1,018,588
Total investments held by the Master Trust at fair value	\$730,706,485	\$794,987,415

The following table is a summary, at contract value, of the net assets of the Master Trust by investment type as of December 31, 2015 and 2014:

	2015	2014
Synthetic investment contracts	\$162,965,928	\$165,415,452
Guaranteed investment contracts	33,537,563	36,938,462
Total investments held by the Master Trust at contract value	\$196,503,491	\$202,353,914

Investment income (loss) attributable to the Master Trust for the year ended December 31, 2015 was as follows:

Net depreciation in fair value of investments	\$(52,372,705)
Income from investments at contract value	4,453,219
Expenses	
Administrative expenses and other, net	(1,635,038)
Total investment loss	\$(49,554,524)

The BNY Mellon Stable Value Fund (the Fund) investment alternative invests in guaranteed investment contracts (GICs), a pooled separate account, actively managed structured or synthetic investment contracts (SICs), and a common collective trust (CCT). The GICs are promises by a bank or insurance company to repay principal plus a fixed rate of return through contract maturity. SICs differ from GICs in that there are specific assets supporting the SICs and these assets are owned by the Plan. The bank or insurance company issues a wrapper contract that allows participant-directed transactions to be made at contract value. The assets supporting the SICs are comprised of government agency bonds, corporate bonds, residential mortgage backed securities, asset-backed securities (ABOs), common collective trusts (CCT), and collateralized mortgage obligations (CMOs).

Interest crediting rates on the GICs in the Fund are determined at the time of purchase. Such interest rates are reviewed and may be reset on a quarterly basis. Interest crediting rates on the SICs are either: (1) set at the time of purchase for a fixed term and crediting rate, (2) set at the time of purchase for a fixed term and variable crediting rate, or (3) set at the time of purchase and reset monthly within a "constant duration." A constant duration contract may specify a duration of 2.5 years, and the crediting rate is adjusted monthly based upon quarterly rebalancing of eligible 2.5 year duration investment instruments at the time of each resetting; in effect the contract never matures. Although it is management's intention to hold the investment contracts in the Fund until maturity, certain investment contracts provide for adjustments to contract value for withdrawals made prior to maturity. 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 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 decided to entirely exit an investment. Investments in registered investment companies 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

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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, 2015 and 2014.

#### 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, 2015 and 2014.

##### 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.

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The following table presents the financial instruments of the Master Trust at fair value by caption on the statements of net assets available for benefits and by category of the valuation hierarchy (as described above) as of December 31, 2015 and 2014. The Master Trust 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, 2015	Level 1	Total
Interest in registered investment companies	\$228,064,975	\$228,064,975
Corporate common stock	37,937,779	37,937,779
Other	786,109	786,109
Other investments measured at net asset value (a)	—	463,917,622
	\$266,788,863	\$730,706,485

December 31, 2014	Level 1	Total
Interest in registered investment companies	\$287,768,013	\$287,768,013
Corporate common stock	79,471,712	79,471,712
Other	1,018,588	1,018,588
Other investments measured at net asset value (a)	—	426,729,102
	\$368,258,313	\$794,987,415

(a) In accordance with ASU 2015-07, 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 statement of assets available for benefits.

In addition to the Plan's investments in the Master Trust, the Plan held \$609,757 and \$5,114,336 in self-directed accounts as of December 31, 2015 and 2014, respectively. These self-directed accounts are invested in registered investment companies and are categorized as Level 1 assets.

#### 5. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service (IRS) dated October 13, 2015 stating that the Plan is qualified under Section 401(a) of the Code and, therefore, the related trust is exempt from taxation. Subsequent to this issuance of the determination letter, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan administrator believes that the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes that the Plan, as amended, is qualified and the related trust is tax-exempt.

The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2015 and 2014, there are no uncertain positions taken or expected to be taken. The earliest tax year open to U.S. Federal examination is 2012.

#### 6. Plan Termination

Although it has 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. In the event of Plan termination, participants would become 100% vested in their employer contributions.

#### 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.





8. Party-In-Interest Transactions

At December 31, 2015 and 2014, the Plan held 22,556 and 543,300 shares, respectively, of common stock of ATI, the sponsoring employer, with a fair value of \$300,031 and \$21,589,487, respectively. The shares held by the Plan at December 31, 2015 and 2014 reflect the Plan's interest in the Master Trust. During the years ended December 31, 2015 and 2014, the Plan recorded investment gain/(loss) of \$843,388 and \$(357,851), respectively, related to its investment in the common stock of ATI.

Allegheny Technologies Retirement Savings Plan

EIN: 25-1792394 Plan: 004

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

December 31, 2015

Description	Current Value
Participant loans* (4.25%, with maturities through 2020)	\$ 411,261
Registered investment companies - Self-directed accounts	609,757

\*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

ALLEGHENY TECHNOLOGIES RETIREMENT SAVINGS  
PLAN

Date: June 10, 2016 By: /s/ Karl D. Schwartz  
Karl D. Schwartz  
Vice President, Controller and Chief Accounting Officer  
(Principal Accounting Officer and Duly Authorized Officer)