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October 23, 2018

Via Electronic Mail (rule-comments@sec.gov)
Mr. Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

> Re: **SEC Market Data and Market Access Roundtable**
> **File No. 4-729**
> **October 25 and 26, 2018**

Dear Mr. Fields:

Virtu Financial Inc. (together with its affiliates, "Virtu" or "we")[1] respectfully submits this letter in advance of the October 25 and 26, 2018 Roundtable on Market Data and Market Access (the "Roundtable") hosted by the staff of the Securities and Exchange Commission's (the "Commission") Division of Trading and Markets. Virtu commends the staff's efforts to critically examine and open for public discussion the controversial issue of market data fees and, importantly, the related issue of connectivity costs.

We also applaud the bold step taken by the Commission – in a unanimous 5-0 decision – to set aside the requests of NYSE Arca, Inc. and Nasdaq Stock Market LLC for two fee increases in connection with certain proprietary data feeds, and to remand the more than 400 fee increases that have been filed and challenged while the underlying litigation has been pending.[2] These

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[1] Virtu is a leading financial firm that leverages cutting edge technology to deliver liquidity to the global markets and innovative, transparent trading solutions to its clients. Virtu operates as a market maker across numerous exchanges in the U.S. and is a member of all U.S. registered stock exchanges. Virtu's market structure expertise, broad diversification, and execution technology enables it to provide competitive bids and offers in over 25,000 securities, at over 235 venues, in 36 countries worldwide. As such, Virtu broadly supports innovation and enhancements to transparency and fairness which enhance liquidity to the benefit of all marketplace participants.

[2] *In the Matter of the Application of Securities Industry and Financial Markets Association*, Exchange Act Release No. 84432 (Oct. 16. 2018), *available at* https://www.sec.gov/litigation/opinions/2018/34-84432.pdf (the " SIFMA Release"); *In the Matter of the Applications of Securities Industry and Financial Markets Association and Bloomberg*, Exchange Act Release No. 84433 (October 16, 2018), *available at* https://www.sec.gov/litigation/opinions/2018/34-84433.pdf.

developments are an important step in the right direction and illustrate the Commission's leadership in advancing the dialogue on this topic.

Rule 611 of Regulation NMS forced market participants to send order flow to every exchange and incentivized the proliferation of multiple exchanges which serve little purpose other than to increase the opportunities for their operators to collect access, market data and connectivity fees. In order to balance this requirement, a check on the exchanges' ability to impose unrestrained access fees was provided in Rule 610 which capped the amount an exchange could charge for executions to $.003 per share. While transaction charges and market data and connectivity fees are two sides of the same coin as you cannot have one without the other, the Commission did not impose a "cap" on market data and connectivity fees, only requiring that they be "fair and reasonable". The exchanges (NYSE, Nasdaq and CBOE, collectively referred to herein as the "Exchanges"), constrained by Rule 610's pricing cap, have simply inflated prices on the market data and connectivity side of the coin where they enjoy unchecked pricing power. Market data and connectivity have simply become "synthetic access fees" unrestrained by real competition.

Contrary to the assertions made by certain of the Exchanges in advance of the Roundtable,[3] the cost of these synthetic access fees has not remained stable over time, and are not subject to competitive forces. The consolidated national best bid and offer ("NBBO"), as aggregated by the securities information processors ("SIPs"), is only available from the SIPs. Exchange proprietary data represents information about each exchange's order book and is unique to the individual exchange. The data, which ironically is created solely by the activities of market participants including Main Street investors' orders and not the exchanges', is not available anywhere else. In order for market participants on both the proprietary trading and institutional agency side of the business to have an aggregated view of the market (to meet their regulatory obligations, and to remain commercially competitive) they must purchase the proprietary data from each of the Exchanges and cannot rely solely on the data provided by the SIPs.

Further evidence that these costs are not subject to competitive forces can be inferred from the pricing schemes devised by the Exchanges themselves. The pricing schemes are byzantine in their complexity and opacity as demonstrated in the voluminous pricing schedules for the NYSE, Nasdaq and CBOE which have been collectively attached as Exhibit "A". Since 2013, the Exchanges have submitted over 400 immediately effective rule filings that create new categories

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[3] *Nasdaq, Promoting Transparency: Nasdaq's Market Data Proposals* (2018), *available at* https://business.nasdaq.com/media/Market_Data_Policy_Statement_tcm5044-65695.pdf; and Charles M. Jones, *Understanding the Market for U.S. Equity Market Data* (Aug. 31, 2018), *available at* https://www0.gsb.columbia.edu/faculty/cjones/papers/2018.08.31%20US%20Equity%20Market%20Data%20Paper. pdf (the "Jones Paper").

of data products and or change the pricing schemes for existing products.[4] The Exchanges have formulated pricing schemes that layer in redundant costs and fees which raises the true cost of market data well above the costs of producing and distributing the data.[5] Based on our experiences globally in 36 countries, it is clear that the Exchanges are able to impose these fees because they are unconstrained by competitive forces.

Over the last 10 years, the markets have become more efficient: bid-ask spreads are narrower than ever before[6] as technological advances have made executions faster and more reliable.[7] Institutional trading commissions have decreased 40% since 2009[8] and clearing costs have declined as internal processes have become more efficient. Literally all costs associated with equity trading have declined except these synthetic access fees where Exchanges exploit the market's inelastic demand.

We believe that these non-competitive practices are harmful to our capital markets, inconsistent with the requirements of the Exchange Act and are just bad policy. The time has come to align the regulatory framework and pricing practices governing market data and connectivity charges with the efficiencies of today's electronic marketplace.

A. Introduction to the Complex World of Market Data and Connectivity Costs

It is important to first focus on a few basic concepts. As previously discussed, a key component of the financial services ecosystem is the NBBO and consolidated last sale information which are sold to the industry by the two SIPs, which are owned and operated by the exchanges. The SIPs distribute the revenues they receive from the sale of this data back to the exchanges.

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[4] In a related Order to the Commission's October 16, 2018 decision, the Commission remanded these rule filings back to the respective exchanges to develop or identify procedures to review them and submit a record to the Commission explain their conclusions. *In the Matter of the Applications of Securities Industry and Financial Markets Association and Bloomberg*, Exchange Act Release No. 84433 (October 16, 2018), *available at* https://www.sec.gov/litigation/opinions/2018/34-84433.pdf

[5] IEX estimates the infrastructure costs as approximately $630,635.00 annually. *See Shakedown in New Jersey: The Hidden Cost of Exchange Connectivity*, September 26, 2018, *available at* https://medium.com/boxes-and-lines/shakedown-in-new-jersey-the-hidden-cost-of-exchange-connectivity-93ebb57187b0

[6] United States Department of Treasury Report, *A Financial System That Creates Economic Opportunities Capital Markets* (Oct. 2017) ("Treasury Report"), *available at* https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-Capital-Markets-FINAL-FINAL.pdf

[7] Treasury Report at 51.

[8] Baert, "Institutional Equity Commission Down 40% From 2009, Greenwich Finds", Pensions & Investments (July 27, 2017) *available at* http://www.pionline.com/article/20170727/ONLINE/170729854/institutional-equity-commissions-down-40-from-2009-greenwich-finds

Additionally, eleven of the thirteen exchanges sell their own proprietary information which includes the respective exchange's own best bid and offer (i.e., their "top of book"), information about orders within the book (typically referred to as "depth of book" information), order book imbalance information, last sale and other proprietary products. Exchange proprietary information contains a more complete order book view and is sent directly to and reaches market participants sooner than SIP information because there is no consolidation step for the proprietary information. The firms that handle the vast majority of orders and execute the vast majority of trades must purchase both SIP and proprietary data in order to meet their best execution obligations and to meaningfully compete.[9] Simply put, Virtu could not fulfill its obligations to its myriad of retail customers and institutional clients without full depth of book market data feeds and robust exchange connectivity features that the SIP feeds alone do not offer. While the Commission has made a distinction between "core" and non-core" products, in reality, all market data and exchange connectivity is "core" as many participants cannot function or meet their regulatory obligations without it.

This seems simple enough and one would expect pricing to be rather straight forward. However, the pricing of this data is anything but transparent. Rather, to obfuscate the true costs to market participants, the Exchanges have broken market data costs into two buckets of fees: "market data licensing costs" and "connectivity". Breaking the costs into these separate categories makes the individual buckets seem less expensive but in fact a market participant cannot obtain the market data unless it first connects to the Exchanges. Thus, these synthetic access fees, market data and connectivity charges, are really a single and substantial cost.

Now here is where it starts to get really interesting – the Exchanges are not just getting a double dip on fees – one dip for the data license itself and another dip for the connectivity – they are getting even more "dips" because most charge several times for the same data, all depending on how their customers use the data and how they access and download the information. The

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[9] As the Commission explained in its October 16, 2018 Order "[T]his argument ignores the fact that some customers do need depth-of-book data....The largest market participants, typically market makers and large institutional brokers, compete in a market where: (1) competition is largely based upon speed, and the slower SIP NBBO is generally inadequate for current trading strategies and not competitive with the faster NBBO derived directly from exchanges' market data; (2) post-decimalization, depth-of-book data from an exchange is necessary to understand the liquidity in various exchanges' order books at multiple price levels in connection with trading a large order; and (3) depth-of-book data provides a trader with the ability to calculate market imbalance information at multiple price levels in order to gain a fuller picture of the balance of supply and demand within a market across multiple price levels, which could potentially provide a directional market signal. Moreover, for alternative trading systems ("ATS") to provide adequate execution quality, they may need to use the faster data directly from exchanges to protect their customers from latency arbitrage and adverse selection of customer orders." SIFMA Release at 41-43.

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additional dipping occurs both for proprietary market data and connectivity and for SIP market data and connectivity.

Let's start with the data itself. Each exchange has its own variation on the theme but they all charge more than once for the same data. For example, under one of these schemes, there are up to five separate charges for the same data, four of which are based on the different ways one might use the data. There is a monthly "Access" charge. There is an internal distribution charge. There is a "Display" charge which is a charge based upon the number of employees looking at the data on a computer screen. In cases where a human looks at displayed data on different trading applications, participants get charged multiple times for the human trader to look at the very same data. On top of that there is a "Non-Display" charge or actually – three types of "Non-Display" charges – one for a firm's computers to use for proprietary trading; one for a firm's computers to use to execute and route customer orders; and one for a firm's computers to "match" orders with each other. Many firms incur all of these charges based upon the use of the same data by employees and firm computers. And remember, the SIPs and eleven of the thirteen exchanges are all charging multiple times for data. These "dips" are not cheap. In his NYSE funded paper, Professor Jones estimates that if a firm incurred all of these fees for depth of book proprietary data feeds from the Exchanges, the firm would pay **$3,186,240** a year.[10] That is for a single category of feeds and does not include SIP costs and connectivity costs.

Now, let's turn to connectivity. Once again, the Exchanges impose multiple synthetic access fees for participants to physically connect to obtain the required data; these costs bear no relation to the Exchanges' actual cost of the connectivity. There are several varieties of monthly recurring fees, including fees for "logical ports" which allow firms to plug into and send orders to the Exchanges, monthly recurring fees to "rent" the physical cable that connects a firm's network with the Exchanges, fees for circuits and for rack space in the Exchanges' owned datacenters. Of course, for risk protocol purposes, every firm needs at least one primary and one backup to connect to each of the two SIPs and to all of the thirteen exchanges. Again, these synthetic access fees bear no relation at all to the costs of providing the connections and are far from "fair and reasonable".

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[10] Jones Paper at 21.

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A Prime Illustration of the Egregiousness of the Exchanges' Connectivity Costs

In one of the more egregious examples, the Exchanges charge a monthly recurring fee to rent connectivity cables as follows: NYSE $22,000 a month or $264,000[11] per year; Nasdaq $20,000 a month or $240,000[12] per year; and the CBOE $7,500 a month or $90,000[13] per year. Every market participant needs at least two of each of these cables for redundancy purposes – resulting in an overall annual cost of $1,188,000. This is on top of an initial "non-recurring" fee of $15,000 per cable for NYSE and $1,500 per cable for Nasdaq.

The actual physical cable the Exchanges use in their data centers to provide direct access to their systems is not unique or specialized from a technology standpoint. In fact, it is widely available from various vendors. Virtu obtained a quote from a vendor and purchased the very same cable for $189.50. As noted on the invoice pictured below, the cable is described as "NASDAQ-SM-100M-Reel 100 Meters SM NASDAQ SPEC" and is pictured below (*figures 1 & 2 below*). Virtu was also able to purchase the same cable on Amazon for a mere $87.95. Using the Amazon price, Virtu could purchase 13,507 of these cables (which are 328 feet in length) and string a line of continuous cable from Nasdaq's data center in Carteret, New Jersey to the CME Group Data Center in Aurora, Illinois and have enough cable left to traverse to Madison, Wisconsin.

Fig. 1. NASDAQ-SM-100M-Reel 100 Meters SM NASDAQ SPEC

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[11] https://www.sec.gov/rules/sro/nyse/2017/34-79730.pdf
[12] https://www.nasdaqtrader.com/content/Productsservices/trading/CoLo/LowLatencyFS.pdf
[13] https://markets.cboe.com/us/equities/membership/fee_schedule/byx/

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QUOTATION

Phone - ███████	Account # 450471
Fax - ███████	Quote # 70072
Email - ███████	Date 09-Oct-18
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VIRTU FINANCIAL, LLC

███████

Terms	NET 30 DAYS
Ship Via	UPS GROUND
FOB	SHIPPING POINT
Reference #	
Contact	███████
Phone #	212-███████

Salesperson ███████

Ln #	Item # / Customer Item # Description	Mfg / DC	Ship Date Request Date	Quantity	Unit Price	Ext Price
1	NASDAQ-SM-100M-REEL 100 METERS SM NASDAQ SPEC Kit Revision: Rev 1 FIBER CABLE DUPLEX SINGLE MODE LC TO LC 100 MT W/ 5IN PLASTIC REEL	MST		1	189.50000	189.50

TOTAL	189.50

QUOTE VALID FOR 30 DAY(S)

_____
Authorized Signature

Fig. 2. Copy of actual invoice for cable utilized by exchanges.

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In the 1980s, the Department of Defense was publicly taken to task for its outlandish spending habits related to the purchase of such common products as hammers ($600), coffee makers ($7,622), screws ($37) and toilet seats ($620).[14] Clearly, there was a lack of transparency and an absence of competitive forces at play when it came to the pricing of these items. In a throwback to these government spending scandals, the Exchanges are exhibiting the same conduct in their market data pricing schemes and imposition of connectivity fees.

B. **Time for Change**

The Securities Acts Amendments of 1975 granted general rule making authority to the Commission to establish a National Market System for securities. In turn, this legislation provided Exchanges with control over the distribution and sale of all electronic equity market data. The logic behind this grant of authority over market data was tied to the notion that exchanges were run by members for the benefit of their members and historically acted as utilities, providing a public service by facilitating trades and matching buyers and sellers. The Commission has opined that the fees charged by an exclusive processor of market information ("core"[15] market data) need to be tied to some type of cost-based standard. In addition, Section 11A of the Exchange Act requires SROs to distribute "non-core" market data on terms that are "fair and reasonable" and "not unreasonably discriminatory".[16]

> *The Commission has stated that through its rules and regulations it seeks to ensure that core data is widely available for reasonable fees. The Commission has also stated, among other things, that investors "must have [core data] to participate in the U.S. equity markets," and "preserv[ing] the integrity and affordability of the consolidated data stream" is "one of the Commission's most important responsibilities." The Commission reviews core data fees (and changes thereto) to ensure that, consistent with Exchange Act Section 11A, they are, among other things, "fair and reasonable" and "not unreasonably discriminatory." Because the three joint-industry plans responsible for disseminating required NMS core data are monopolistic providers of such data, there is no market competition that can be relied upon to set prices. As a result, the Commission has stated that core data fees*

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[14]Jack Smith, *$37 screws, a $7,622 coffee maker, $640 toilet seats; suppliers to our military just won't be oversold*, Los Angeles Times (July 30, 1986), *available at* http://articles.latimes.com/1986-07-30/news/vw-18804_1_nut; *Dep't of Hundred Dollar Toilet Seats*, New York Times (Feb.18, 1986), *available at* https://www.nytimes.com/1986/02/18/us/dept-of-hundred-dollar-toilet-seats.html

[15] "Core" market data refers to the SIP while "non-core" pertains to proprietary feeds. *See,* SIFMA Release at 4 and 5.

[16] *See SEC Concept Release: Regulation of Market Information Fees and Revenues*, Release No. 34-42208, December 9, 1999, *available at* https://www.sec.gov/rules/concept/34-42208.htm.

"need to be tied to some type of cost based standard" in order to assess their *fairness and reasonableness.*[17] (citations omitted)

The industry ecosystem changed with the evolution of Exchanges to for profit, shareholder-owned, commercial enterprises. Exchanges no longer act as a "public utility" - instead, the Exchanges collect and sell market data (that firms like Virtu and other market participants generate through their respective market activities)[18] while they directly compete for order flow. Since the transition from member owned and run public utilities to for-profit corporations, the Exchanges have continued to benefit from outdated protections to the disadvantage of other market participants and Main Street investors. As Commissioner Jackson stated:

> *For over a century, exchanges were collectively owned not-for-profits, overseeing and organizing trading in America's best-known companies. But about a decade ago, exchanges became private corporations, designed—perhaps even obligated— to maximize profits. Yet we at the SEC have far too often continued to treat the exchanges with the same kid gloves we applied to their not-for-profit ancestors. The result is that, even while one our fundamental mandates is to encourage competition, the SEC has stood on the sidelines while enormous market power has become concentrated in just a few players. That's a key reason why among our 13 public stock exchanges, 12 are owned by just three corporations. **And that's how the stock exchanges that are a symbol of American capitalism have developed puzzling practices that look nothing like the competitive marketplaces investors deserve.**[19]* (emphasis supplied)

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[17] *In the Matter of the Application of Securities Industry and Financial Markets Association*. Release No. 83755 (July 31, 2018) https://www.sec.gov/litigation/opinions/2018/34-83755.pdf

[18] "Exchanges don't create any unique content — market data is generated by their members and other market participants including real investors — so it's very hard to believe that exchanges can perpetually charge their members more every year to look at the members' own data," Brad Katsuyama, CEO of IEX Group. *Turner, Business Insider (Nov. 3, 2016), available at* https://www.businessinsider.com/stock-exchanges-market-data-cost-becoming-big-issue-2016-10

[19] *See* Commissioner Robert Jackson, Jr. Speech, *Unfair Exchange: The State of America's Stock Markets*, George Mason University (Sept. 19, 2018) *available at* https://www.sec.gov/news/speech/jackson-unfair-exchange-state-americas-stock-markets (the "Jackson Speech").

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Increase in Market Data Fees Has Been Meteoric

The Exchanges have devoted significant time and financial resources in spinning the false narrative that increases in fees for market data and related connectivity services have remained "modest" and "stable" over time. Quite the opposite is true – the Exchanges have regularly increased fees for market data and related services as a means to compensate for stagnating or declining revenue streams in their transaction businesses that actually face competitive pressure. While the profitability of listings and order matching fees have declined, market data and connectivity fees have increased to fill the resulting revenue gap. For example, as reported by the *Wall Street Journal* and reflected in the following chart, from 2014 to 2017, total annual revenues from market-data services for the NYSE, Nasdaq and CBOE increased 45% to $2.3 billion according to the analysis of one research group.[20]

Growth Business

Combined market-data revenue for NYSE parent Intercontinental Exchange, Nasdaq and Cboe grew 45% since 2014, according to one analysis.
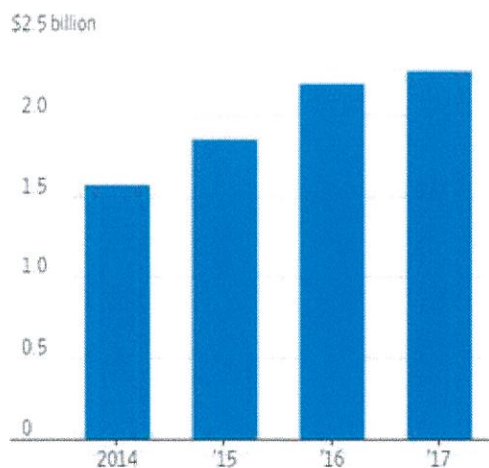
Another commentator noted that global exchange revenues in 2016 were driven by a 29.2% increase in market data revenues to a total of $5.4 billion.[21] Further, again as reported by the *Wall*

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[20] Osipovich, Michaels and Morgenson, *SEC Ruling Takes Aim at Stock Exchange Profits*, The Wall Street Journal (Oct. 16, 2018)(the "SEC Ruling Article").

[21] Joe Parsons, *Exchange Data Made Up a Third of Revenues in 2016,* Tradeweb FINREG Alert (July 11, 2017), *available at* http://www.finregalert.com/exchange-data-made-up-a-third-of-revenues-in/

Street Journal, disclosures from ICE (NYSE's parent company), Nasdaq and CBOE show that combined stock market data revenues were approximately $560 million in 2017 **not including connectivity charges**.[22] The Commission also noted in its October 16, 2018 decision that "[t]he exchanges argue that the prices they charge for depth-of-book data have remained relatively stable and attribute this to an inability to raise prices due to the existence of alternatives to their products. Contrary to this assertion, NYSE Arca has raised or modified every charge specified in its 2008 ArcaBook Fee Rule and introduced new fees."[23] The reason they are able to do so is because the demand for these products is inelastic, i.e. unresponsive to price increases.

Fee increases take many forms, including changes in the terms of licensing agreements, development of new categories of fees, and constant redefinition of fees. The Exchanges continue to create new proprietary non-competitive fee categories and connectivity offerings to increase the overall costs to consumers, while the products and services themselves remain virtually the same. In addition, as Commissioner Jackson made clear, these charges impact investors:

> *When the SEC enacted these rules, we saw that there would be cases where brokers would be required to send the order to a specific exchange, leaving the broker— and, crucially, their customer—exposed to excessive trading fees on that exchange. So we capped the fees the exchanges can charge. But facing a limit on one kind of fee, exchanges may have simply raised other fees, like the cost of connecting to the exchange. And because our rules require orders to be routed in this way, we risk that the law—rather than market forces—drives the price investors pay to connect.*[24]

Connectivity Charges are a Hidden Component of these Fee Increases

The Exchanges would have the public believe that market data costs have been static over the last few years. That rhetoric is simply not true. The Exchanges try to pigeonhole the issue by limiting the argument to pure market data costs. However, as noted above, firms must pay the "connectivity toll" to access the market data - a fact that the Exchanges would have the public ignore. The exorbitant price increases for connectivity and access imposed by the Exchanges are neither fair nor reasonable and should be an area of inquiry by the Commission.

On September 6, 2018, ICE issued a press release touting the results of a study it funded, asserting that the analysis "reaffirms that exchanges deliver moderate prices, high value market

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[22] *See*, SEC Ruling Article.
[23] SIFMA Release at 47- 48.
[24] Jackson Speech at 3.

data that enables users to fuel investment decisions for better business returns."[25] Yet, the 51-page paper funded by the NYSE, makes only passing reference to "access fees" and "user fees" in a handful of paragraphs. None of these references accurately represents what firms truly pay to connect to the Exchanges, and the study is completely silent with respect to the Exchanges' costs to deliver these products.

The Exchanges Purposefully Obfuscate Their Disclosures and Product Descriptions so that Fee Hikes Cannot Be Tracked

The exchange holding companies do not clearly disclose in their public filings how their market data revenues are generated. In other words, the only available data consists of the financial data that the exchange holding companies decide to disclose in their public filings or other disclosed documents. As Commissioner Jackson noted, "[o]ur stock markets would benefit a great deal from greater transparency about how exchanges make their money."[26]

Although the Exchanges recently have begun to make modest enhancements, their disclosures related to market data fees remain inadequate.[27] There is no requirement that Exchanges itemize by product or service their revenues from the sale of market data; nor that they provide information about the costs of providing market data. There is also no mandate that the Exchanges standardize the categories and definitions of the products and services they offer – compounding the ability of market participants to compare and make reasoned judgments about the fees they are paying to different exchanges for the same offering.

As a result, it also is exceedingly difficult for market participants to make informed comments in response to exchange fee increases, and for the Commission to make reasoned findings. As the Commission itself has stated, "fairness and reasonableness must be explained and supported in such a manner that the Commission has sufficient information before it to satisfy its statutorily mandated review function...."[28]

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[25] *See* ICE, *Market Data: The Lifeblood of Efficient Engagement in Global Markets* (Sept. 6, 2018), *available at* https://ir.theice.com/press/press-releases/all-categories/2018/09-06-2018-133047196

[26] Jackson Speech at 4.

[27] For example, on September 29, 2017, Nasdaq issued *Data News 2017-18 entitled Nasdaq Announces BX TotalView Non-Display Subscriber Fee, Effective January 1, 2018-UPDATED* (the "BX Notice"), *available at* http://www.nasdaqtrader.com/TraderNews.aspx?id=dn2017-18. In the BX Notice Nasdaq touted the fact that "due to the competitive dynamics of the marketplace for Exchange information, Nasdaq has decided to reduce the proposed price charge from $65-$55." In announcing this $10 per month reduction, Nasdaq glossed over that in the very same notice, it had informed market participants that it had concurrently the increased the monthly non-display usage enterprise license from $16,000 to $20,000.

[28] SIFMA Release at 14-15.

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C. Recommendations

In making its recommendations, Virtu draws on the wisdom of Louis Brandeis, who said "publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman."[29] As public outcry has begun to open the shades and let the sunlight begin to illuminate the opaque world of market data and connectivity fees, Virtu respectfully submits the following recommendations:

1. The Commission should require that SIP Plan Processors and the Exchanges publicly disclose on quarterly basis:

   a. The revenues earned in aggregate and individually for each form of market data that is distributed for sale, including all revenues generated from connectivity charges; and

   b. The direct costs associated with compiling and distributing the data, including connectivity costs, in a transparent and itemized fashion.

2. The Commission should develop formal guidelines for the SEC staff review of rule proposals that relate to the imposition of fees on market participants for market data and connectivity to ensure that these filings comport with the procedural fairness requirements applicable to prohibitions or limitations on access to exchange services.

3. The Commission should require the Exchanges to provide access to their raw data at cost and allow for the development of competitors who may sell market data products such as the aggregated NBBO, depth of book data, and other products they might conceive.

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[29] Louis D. Brandeis, *Other People's Money and How the Bankers Use It* (1914).

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Virtu appreciates this opportunity to submit this letter and to participate in the Market Data and Market Access Roundtable. Please do not hesitate to contact me if you have any questions regarding any of the comments provided in this submission.

Sincerely yours,

Douglas A. Cifu
Chief Executive Officer

cc: The Honorable Jay Clayton, Chairman
        The Honorable Hester Peirce, Commissioner
        The Honorable Kara M. Stein, Commissioner
        The Honorable Robert J. Jackson, Jr., Commissioner
        The Honorable Elad L. Roisman, Commissioner
        Brett Redfearn, Director, Division of Trading and Markets

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Exhibit "A"

NYSE PDP

Market Data

Pricing

January 2017

Table of Contents

NYSE Proprietary Market Data:

1. NYSE Classic

1.1   NYSE Integrated

For mo re details, see: http://www.nyse.com/integrated

1.1.1   Access Fee

Description	Product Name	Rate	Product Code
NYSE Integrated Access Fee	NYSE INTEGRATED: ACCESS FEE	$7,500.00	38002

1.1.2   Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Integrated Multiple Data Feed Fee	NYSE INTEGRATED: MULTIPLE DATA FEED FEE	$200.00	36097

1.1.3   Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE Integrated Redistribution Fee	NYSE INTEGRATED: REDISTRIBUTION FEE	$4,000.00	38003

1.1.4   Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE INTEGRATED: NON-DISPLAY CATEGORY 1	$20,000.00	38004
Non-Display Fee – Category 2	NYSE INTEGRATED: NON-DISPLAY CATEGORY 2	$20,000.00	38005
Non-Display Fee – Category 3	NYSE INTEGRATED: NON-DISPLAY CATEGORY 3	$20,000.00	38006
Non-Display Fee – No Non-Display	NYSE INTEGRATED: NO NON-DISPLAY	$0.00	38007
Non-Display Declaration Late Fee	NYSE INTEGRATED: LATE NON-DISPLAY DECLARATION	$1,000.00	

1.1.5   Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per user) – Integrated	NYSE INTEGRATED: PRO DEVICE	$70.00	38008
Non Professional User	NYSE INTEGRATED: NON PRO DEVICE	$16.00	38009

1.1.6   Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE Integrated Data Feed	NYSE INTEGRATED: DATAFEED	$0.00	38010

*Access Fee will apply for the receipt of this product via a datafeed delivery

NYSE

1.2 NYSE OpenBook

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-OpenBook

1.2.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE OpenBook Ultra Access Fee	NYSE OPENBOOK ULTRA: ACCESS FEE	$5,000.00	32001
NYSE OpenBook Aggregated Access Fee	NYSE OPENBOOK AGGREGATED: ACCESS FEE	$5,000.00	32251

1.2.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE OpenBook Multiple Data Feed Fee	NYSE OPENBOOK: MULTIPLE DATA FEED FEE	$200.00	36098

1.2.3 Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE OpenBook Redistribution Fee	NYSE OPENBOOK: REDISTRIBUTION FEE	$3,000.00	32583

1.2.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE OPENBOOK: NON-DISPLAY CATEGORY 1	$6,000.00	38100
Non-Display Fee – Category 2	NYSE OPENBOOK: NON-DISPLAY CATEGORY 2	$6,000.00	38101
Non-Display Fee – Category 3 (Per Platform)	NYSE OPENBOOK: NON-DISPLAY CATEGORY 3	$6,000.00 Cap:$18,000.00	38102
Non-Display Fee – No Non-Display	NYSE OPENBOOK: NO NON-DISPLAY	$0.00	38170
Non-Display Declaration Late Fee	NYSE OPENBOOK: LATE NON-DISPLAY DECLARATION	$1,000.00	32479

1.2.5 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per user) – OpenBook Real Time	NYSE OPENBOOK AGGREGATED: PRO DEVICE	$60.00	32999
Professional User Fee (Per user) – OpenBook Ultra	NYSE OPENBOOK ULTRA: PRO DEVICE	$60.00	32991
Non Professional User	NYSE OPENBOOK: NON PRO DEVICE	$15.00	32786
Non Professional – Enterprise Eligible Device (Broker/Dealers only) (See Appendix)	NYSE OPENBOOK: NON PRO DEVICE - BD ENTP ELIG	$15.00 Cap:$25,000.00	32787

1.2.6 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE OpenBook Aggregated Data Feed	NYSE OPENBOOK AGGREGGATED: DATAFEED	$0.00	37999
NYSE OpenBook Ultra Data Feed	NYSE OPENBOOK ULTRA: DATAFEED	$0.00	37990

*Access Fee will apply for the receipt of these products via a datafeed delivery

1.3 NYSE BBO

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-BBO

1.3.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE BBO Access Fee	NYSE BBO: ACCESS FEE	$1,500.00	32012

1.3.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE BBO Multiple Data Feed Fee	NYSE BBO: MULTIPLE DATA FEED FEE	$200.00	36100

1.3.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE BBO: NON-DISPLAY CATEGORY 1	$1,500.00	38103
Non-Display Fee – Category 2	NYSE BBO: NON-DISPLAY CATEGORY 2	$1,500.00	38104
Non-Display Fee – Category 3	NYSE BBO: NON-DISPLAY CATEGORY 3	$1,500.00	38105
Non-Display Fee – No Non-Display	NYSE BBO: NO NON-DISPLAY	$0.00	38171
Non-Display Declaration Late Fee	NYSE BBO: LATE NON-DISPLAY DECLARATION	$1,000.00	32480

1.3.4 Subscriber Fee / Enterprise Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per user)	NYSE BBO: PRO DEVICE	$4.00	32928
Non Professional User	NYSE BBO: NON PRO DEVICE	$0.20	32929
Enterprise Fee[2]	NYSE BBO: ENTERPRISE FEE	$37,500.00	32953

[2]No fee if already subscribed to NYSE Trades Enterprise

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

1.3.5 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE BBO Data Feed	NYSE BBO: DATAFEED	$0.00	37040

*Access Fee will apply for the receipt of this product via datafeed delivery

1.4 NYSE Trades

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-Trades

1.4.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Trades Access Fee	NYSE TRADES: ACCESS FEE	$1,500.00	32300

1.4.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Trades Multiple Data Feed Fee	NYSE TRADES: MULTIPLE DATA FEED FEE	$200.00	36101

1.4.3 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE TRADES: REDISTRIBUTION FEE	$1,000.00	32206

1.4.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE TRADES: NON-DISPLAY CATEGORY 1	$3,000.00	38106
Non-Display Fee – Category 2	NYSE TRADES: NON-DISPLAY CATEGORY 2	$3,000.00	38107
Non-Display Fee – Category 3	NYSE TRADES: NON-DISPLAY CATEGORY 3	$3,000.00	38108
Non-Display Fee – No Non-Display	NYSE TRADES: NO NON-DISPLAY	$0.00	38172
Non-Display Declaration Late Fee	NYSE TRADES: LATE NON-DISPLAY DECLARATION	$1,000.00	32481

1.4.5 Subscriber Fee/Enterprise Fee

Description	Product Name	Rate	Product Code
Professional User Fee	NYSE TRADES: PRO DEVICE	$4.00	32400
Non Professional User	NYSE TRADES: NON PRO DEVICE	$0.20	32954
Enterprise Fee[2]	NYSE TRADES: ENTERPRISE FEE	$37,500.00	32955

[2] A single Enterprise fee will apply for clients with both NYSE BBO and NYSE Trades Enterprise Licenses

1.4.6 Digital Media Enterprise Fee

Description	Product Name	Rate	Product Code
Digital Media Enterprise Fee	NYSE TRADES: DIGITAL MEDIA ENTERPRISE FEE	$40,000.00	32201

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

1.4.7 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE Trades Data Feed	NYSE TRADES: DATAFEED	$0.00	37041

*Access Fee will apply for the receipt of this product via datafeed delivery

1.5 NYSE Alerts
For more details, see: http://www.nyxdata.com/Data-Products/NYSE-Alerts

1.5.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Alerts Access Fee	NYSE ALERTS: ACCESS FEE	$500.00	32002

1.5.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Alerts Multiple Data Feed Fee	NYSE ALERTS: MULTIPLE DATA FEED FEE	$200.00	36103

1.5.3 Subscriber Fee

Description	Product Name	Rate	Product Code
Device Fee	N/A	$0.00	N/A

1.5.4 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Alerts Data Feed	NYSE ALERTS: DATAFEED	$0.00	37021

*Access Fee will apply for the receipt of these product via datafeed delivery

1.6 NYSE Order Imbalance
For more details, see: http://www.nyxdata.com/Data-Products/NYSE-Imbalance-Datafeed

1.6.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Order Imbalance Access Fee	NYSE ORDER IMBALANCE: ACCESS FEE	$500.00	32980

1.6.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Order Imbalance Multiple Data Feed Fee	NYSE ORDER IMBALANCE: MULTIPLE DATA FEED FEE	$200.00	36102

1.6.3 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per user)	NYSE ORDER IMBALANCE: PRO DEVICE	$0.00	32641
Professional User Fee (Per user) Indirect	NYSE ORDER IMBALANCE: PRO DEVICE INDIRECT	$0.00	69006
Non Professional User	NYSE ORDER IMBALANCE: NON PRO DEVICE	$0.00	32642

1.6.4 Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE Order Imbalance Redistribution Fee	NYSE ORDER IMBALANCE: REDISTRIBUTION FEE	$0.00	32649

1.6.5 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ORDER IMBALANCE: NON-DISPLAY CATEGORY 1	$2,000.00	38109
Non-Display Fee – Category 2	NYSE ORDER IMBALANCE: NON-DISPLAY CATEGORY 2	$2,000.00	38110
Non-Display Fee – Category 3	NYSE ORDER IMBALANCE: NON-DISPLAY CATEGORY 3	$2,000.00	38111
Non-Display Fee – No Non-Display	NYSE ORDER IMBALANCE: NO NON-DISPLAY	$0.00	38173
Non-Display Declaration Late Fee	NYSE ORDER IMBALANCE: LATE NON-DISPLAY DECLARATION	$1,000.00	32482

1.6.6 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE Order Imbalance Data Feed	NYSE DATAFEED - ORDER IMBALANCES	$0.00	37991

*Access Fee will apply for the receipt of this product via a datafeed delivery

2 NYSE MKT

2.1 NYSE MKT Integrated

For more details, see: http://www.nyse.com/mktintegrated

2.1.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE MKT Integrated Access Fee	NYSE MKT INTEGRATED: ACCESS FEE	$2,500.00	38011

2.1.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE MKT Integrated Multiple Data Feed Fee	NYSE MKT INTEGRATED: MULTIPLE DATA FEED FEE	$200.00	36104

2.1.2 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE MKT INTEGRATED: REDISTRIBUTION FEE	$1500.00	38012

2.1.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE MKT INTEGRATED: NON-DISPLAY CATEGORY 1	$5,000.00	38013
Non-Display Fee – Category 2	NYSE MKT INTEGRATED: NON-DISPLAY CATEGORY 2	$5,000.00	38014
Non-Display Fee – Category 3	NYSE MKT INTEGRATED: NON-DISPLAY CATEGORY 3	$5,000.00	38015
Non-Display Fee – No Non-Display	NYSE MKT INTEGRATED: NO NON-DISPLAY	$0.00	38016
Non-Display Declaration Late Fee	NYSE MKT INTEGRATED: LATE NON-DISPLAY	$1,000.00	

2.1.4 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee	NYSE MKT INTEGRATED: PRO DEVICE	$10.00	38017
Non Professional User Fee	NYSE MKT INTEGRATED: NON PRO DEVICE	$2.00	38018

2.1.5 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE MKT Integrated Data Feed	NYSE MKT OPENBOOK AGGREGATED: DATAFEED	$0.00	38019

*Access Fee will apply for the receipt of these products via a datafeed delivery

2.2 NYSE MKT OpenBook

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-MKT-OpenBook

2.2.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE MKT OpenBook Access Fee	NYSE MKT OPENBOOK: ACCESS FEE	$1,000.00	32592

2.2.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE MKT OpenBook Multiple Data Feed Fee	NYSE MKT OPENBOOK: MULTIPLE DATA FEED FEE	$200.00	36105

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

2.2.3 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE MKT OPENBOOK: REDISTRIBUTION FEE	$0.00	32580

2.2.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE MKT OPENBOOK: NON-DISPLAY CATEGORY 1	$2,000.00	38124
Non-Display Fee – Category 2	NYSE MKT OPENBOOK: NON-DISPLAY CATEGORY 2	$2,000.00	38125
Non-Display Fee – Category 3 (Per Platform)	NYSE MKT OPENBOOK: NON-DISPLAY CATEGORY 3	$2,000.00 Cap:$6,000.00	38126
Non-Display Fee – No Non-Display	NYSE MKT OPENBOOK: NO NON-DISPLAY	$0.00	32487
Non-Display Declaration Late Fee	NYSE MKT OPENBOOK: LATE NON-DISPLAY	$1,000.00	38178

2.2.5 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee	NYSE MKT OPENBOOK AGGREGATED: PRO DEVICE	$5.00	32599
Professional User Fee	NYSE MKT OPENBOOK ULTRA: PRO DEVICE	$5.00	32699
Non Professional User Fee	NYSE MKT OPENBOOK: NON PRO DEVICE	$1.00	32581
Non Professional Cap (Broker/Dealers Only)	NYSE MKT OPENBOOK: NON PRO DEVICE - BD ENTP ELIG	$20,000.00	32582

2.2.6 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE MKT OpenBook Aggregated Data Feed	NYSE MKT OPENBOOK AGGREGATED: DATAFEED	$0.00	37200
NYSE MKT OpenBook Ultra Data Feed	NYSE MKT OPENBOOK ULTRA: DATAFEED	$0.00	37201

*Access Fee will apply for the receipt of these products via a datafeed delivery

2.3 NYSE MKT BBO

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-MKT-BBO

2.3.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE MKT BBO Access Fee	NYSE MKT BBO: ACCESS FEE	$750.00	36240

2.3.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE MKT BBO Multiple Data Feed Fee	NYSE MKT BBO: MULTIPLE DATA FEED FEE	$200.00	36107

2.3.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE MKT BBO: NON-DISPLAY CATEGORY 1	$500.00	38127
Non-Display Fee – Category 2	NYSE MKT BBO: NON-DISPLAY CATEGORY 2	$500.00	38128

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

Non-Display Fee – Category 3	NYSE MKT BBO: NON-DISPLAY CATEGORY 3	$500.00	38129
Non-Display Fee – No Non-Display	NYSE MKT BBO: NO NON-DISPLAY	$0.00	38179
Non-Display Declaration Late Fee	NYSE MKT BBO: LATE NON-DISPLAY	$1,000.00	32488

2.3.4 Subscriber Fee/Enterprise Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE MKT BBO DEVICE FEE	$1.00	32931
Non Professional User Fee	NYSE MKT BBO: NON PRO DEVICE	$0.05	32932
Enterprise Fee[2]	NYSE MKT BBO: ENTERPRISE FEE	$3,000.00	32960

[2] A single Enterprise fee will apply for clients with both NYSE MKT BBO and NYSE MKT Trades Enterprise Licenses.

2.3.5 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE MKT BBO Data Feed	NYSE MKT BBO: DATAFEED	$0.00	37204

*Access Fee will apply for the receipt of this product via a datafeed delivery

2.4 NYSE MKT Trades

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-MKT-Trades

2.4.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE MKT Trades Access Fee	NYSE MKT TRADES: ACCESS FEE	$750.00	32301

2.4.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE MKT Trades Multiple Data Feed Fee	NYSE MKT TRADES: MULTIPLE DATA FEED FEE	$200.00	36108

2.4.3 Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE MKT Trades Redistribution Fee	NYSE MKT TRADES: REDISTRIBUTION FEE	$750.00	32211

2.4.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE MKT TRADES: NON-DISPLAY CATEGORY 1	$1,500.00	38130
Non-Display Fee – Category 2	NYSE MKT TRADES: NON-DISPLAY CATEGORY 2	$1,500.00	38131
Non-Display Fee – Category 3	NYSE MKT TRADES: NON-DISPLAY CATEGORY 3	$1,500.00	38132
Non-Display Fee – No Non-Display	NYSE MKT TRADES: NO NON-DISPLAY	$0.00	38180
Non-Display Declaration Late Fee	NYSE MKT TRADES: LATE NON-DISPLAY	$1,000.00	32489

2.4.5 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE MKT TRADES: PRO DEVICE	$1.00	32403
Non Professional User Fee (Per User)	NYSE MKT TRADES: NON PRO DEVICE	$0.05	32961
Enterprise Fee[2]	NYSE MKT TRADES: ENTERPRISE FEE	$3,000.00	32962

[2] A single Enterprise fee will apply for clients with both NYSE MKT BBO and NYSE MKT Trades Enterprise Licenses.

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

2.4.6 Digital Media Fee

Description	Product Name	Rate	Product Code
Digital Media Enterprise Fee	NYSE MKT TRADES: DIGITAL MEDIA ENTERPRISE FEE	$5,000.00	32203

2.4.7 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE MKT Trades Data Feed	NYSE MKT TRADES: DATAFEED	$0.00	37042

*Access Fee will apply for the receipt of this product via a datafeed delivery

2.5 NYSE MKT Alerts

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-MKT-Alerts

2.5.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE MKT Alerts Access Fee	NYSE MKT ALERTS: ACCESS FEE	$0.00	32590

2.5.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE MKT Alerts Multiple Data Feed Fee	NYSE MKT ALERTS: MULTIPLE DATA FEED FEE	$0.00	36110

2.5.3 User Fee

Description	Product Name	Rate	Product Code
Device Fee	N/A	$0.00	N/A

2.5.4 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE MKT Alerts Data Feed	NYSE MKT ALERTS: DATAFEED	$0.00	37120

*Access Fee will apply for the receipt of this product via datafeed delivery

2.6 NYSE MKT Order Imbalances

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-MKT-Order-Imbalances

2.6.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE MKT Order Imbalance Access Fee	NYSE MKT ORDER IMBALANCE: ACCESS FEE	$500.00	32200

2.6.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE MKT Order Imbalance Multiple Data Feed Fee	NYSE MKT ORDER IMBALANCE: MULTIPLE DATA FEED FEE	$200.00	36109

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

NYSE

2.6.3 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per user)	NYSE MKT ORDER IMBALANCE: PRO DEVICE	$0.00	32643
Professional User Fee (Per user) Indirect	NYSE MKT ORDER IMBALANCE: PRO DEVICE INDIRECT	$0.00	69007
Non Professional User	NYSE MKT ORDER IMBALANCE: NON PRO DEVICE	$0.00	32644

2.6.4 Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE MKT Order Imbalance Redistribution Fee	NYSE MKT ORDER IMBALANCE: REDISTRIBUTION FEE	$0.00	32650

2.6.5 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE MKT ORDER IMBALANCE: NON-DISPLAY CATEGORY 1	$500.00	38133
Non-Display Fee – Category 2	NYSE MKT ORDER IMBALANCE: NON-DISPLAY CATEGORY 2	$500.00	38134
Non-Display Fee – Category 3	NYSE MKT ORDER IMBALANCE: NON-DISPLAY CATEGORY 3	$500.00	38135
Non-Display Fee – No Non-Display	NYSE MKT ORDER IMBALANCE: NO NON-DISPLAY	$0.00	38181
Non-Display Declaration Late Fee	NYSE MKT ORDER IMBALANCE: LATE NON-DISPLAY	$1,000.00	32490

2.6.6 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE MKT Order Imbalance Data Feed	NYSE MKT ORDER IMBALANCE: DATAFEED	$0.00	37203

*Access Fee will apply for the receipt of this product via a datafeed delivery

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

3 NYSE Arca

3.1 NYSE Arca Integrated Feed

For more details, see: http://www.nyxdata.com/nysedata/Default.aspx?tabid=1084

3.1.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Arca Integrated Feed Access Fee	NYSE ARCA INTEGRATED FEED: ACCESS FEE	$3,000.00	39066

3.1.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Arca Integrated Multiple Data Feed Fee	NYSE ARCA INTEGRATED: MULTIPLE DATA FEED FEE	$200.00	36091

3.1.3 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE ARCA INTEGRATED FEED: REDISTRIBUTION FEE	$3,000.00	39069

3.1.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCA INTEGRATED FEED: NON-DISPLAY CATEGORY 1	$7,000.00	38112
Non-Display Fee – Category 2	NYSE ARCA INTEGRATED FEED: NON-DISPLAY CATEGORY 2	$7,000.00	38113
Non-Display Fee – Category 3 (Per Platform)	NYSE ARCA INTEGRATED FEED: NON-DISPLAY CATEGORY 3	$7,000.00 Cap: $21,000.00	38114
Non-Display Fee – No Non-Display	NYSE ARCA INTEGRATED FEED: NO NON-DISPLAY	$0.00	38174
Non-Display Declaration Late Fee	NYSE ARCA INTEGRATED FEED: LATE NON-DISPLAY	$1,000.00	32483

3.1.5 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User/Entitlement)	NYSE ARCA INTEGRATED FEED: PRO DEVICE	$40.00	39068
Non Professional User	NYSE ARCA INTEGRATED FEED: NON PRO DEVICE	$20.00	39070
Per Quote	N/A	Not Offered	N/A

3.1.6 *Data Feed Marker

Description	Product Name	Rate	Product Code
*NYSE Arca Integrated Data Feed	NYSE ARCA INTEGRATED FEED: DATAFEED	$0.00	39071

*Access Fee will apply for the receipt of this product via a datafeed delivery

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

3.2 NYSE ArcaBook
For more details, see: http://www.nyxdata.com/Data-Products/NYSE-ArcaBook

3.2.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE ArcaBook Access Fee	NYSE ARCABOOK: ACCESS FEE	$2,000.00	39001

3.2.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE ArcaBook Multiple Data Feed Fee	NYSE ARCABOOK: MULTIPLE DATA FEED FEE	$200.00	36092

3.2.3 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE ARCABOOK: REDISTRIBUTION FEE	$1,500.00	39583

3.2.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCABOOK: NON-DISPLAY CATEGORY 1	$5,000.00	38115
Non-Display Fee – Category 2	NYSE ARCABOOK: NON-DISPLAY CATEGORY 2	$5,000.00	38116
Non-Display Fee – Category 3 (Per Platform)	NYSE ARCABOOK: NON-DISPLAY CATEGORY 3	$5,000.00 Cap: $15,000.00	38117
Non-Display Fee – No Non-Display	NYSE ARCABOOK: NO NON-DISPLAY	$0.00	38175
Non-Display Declaration Late Fee	NYSE ARCABOOK: LATE NON-DISPLAY	$1,000.00	32484

3.2.5 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User/Entitlement)	NYSE ARCABOOK: PRO DEVICE	$40.00	39014
Non Professional User – (All Markets)	NYSE ARCABOOK: NON PRO DEVICE	$10.00	39015
Non Professional User – Broker Dealers ONLY*	NYSE ARCABOOK: NON PRO DEVICE CAP ELIG Cap	$10.00 $40,000.00	39011
Per Quote	N/A	Not Offered	N/A

3.2.6 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE ArcaBook High-speed Data Feed	NYSE ARCABOOK - HIGHSPEED: DATAFEED	$0.00	37136
NYSE ArcaBook OTC Data Feed	NYSE ARCABOOK - OTC: DATAFEED	$0.00	37034
NYSE ArcaBook ETF/Listed Data Feed	NYSE ARCABOOK - ETF/LISTED: DATAFEED	$0.00	37035
NYSE ArcaBook Listed Data Feed	NYSE ARCABOOK - LISTED: DATAFEED	$0.00	37036
NYSE ArcaBook ETF Data Feed	NYSE ARCABOOK - ETF: DATAFEED	$0.00	37037
NYSE ArcaBook OTC, OTCBB DF	NYSE ARCABOOK - OTC, OTCBB: DATAFEED	$0.00	37038
NYSE ArcaBook Listed, OTC, OTCBB and Bonds Data Feed	NYSE ARCABOOK - OTC, LISTED, BB & BONDS: DATAFEED	$0.00	37027

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

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NYSE

NYSE ArcaBook OCT , OTCBB Data Feed	NYSE ARCABOOK - OTC, LISTED, OTCBB: DATAFEED	$0.00	37029

*Access Fee will apply for the receipt of these products via a datafeed delivery

3.3 NYSE Arca BBO

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-Arca-Quotes-Datafeed

3.3.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Arca BBO Access Fee	NYSE ARCA BBO: ACCESS FEE	$750.00	39016

3.3.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Arca BBO Multiple Data Feed Fee	NYSE ARCA BBO: MULTIPLE DATA FEED FEE	$200.00	36093

3.3.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCA BBO: NON-DISPLAY CATEGORY 1	$1,000.00	38118
Non-Display Fee – Category 2	NYSE ARCA BBO: NON-DISPLAY CATEGORY 2	$1,000.00	38119
Non-Display Fee – Category 3	NYSE ARCA BBO: NON-DISPLAY CATEGORY 3	$1,000.00	38120
Non-Display Fee – No Non-Display	NYSE ARCA BBO: NO NON-DISPLAY	$0.00	38176

3.3.4 Subscriber Fee/Enterprise Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE ARCA BBO: PRO DEVICE	$4.00	39017
Non Professional User	NYSE ARCA BBO: NON PRO DEVICE	$0.25	39018
Enterprise Fee[1]	NYSE ARCA BBO: ENTERPRISE FEE	$34,500.00	32956

[1]A single Enterprise fee will apply for clients with both NYSE Arca BBO and NYSE Arca Trades Enterprise Licenses

3.3.5 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Arca BBO Data Feed	NYSE ARCA BBO: DATAFEED	$0.00	37048

*Access Fee will apply for the receipt of this product via a datafeed delivery

3.4 NYSE Arca Trades
For more details, see: http://www.nyxdata.com/Data-Products/NYSE-Arca-Trades

3.4.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Arca Trades Access Fee	NYSE ARCA TRADES: ACCESS FEE	$750.00	32302

3.4.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Arca Trades Multiple Data Feed Fee	NYSE ARCA TRADES: MULTIPLE DATA FEED FEE	$200.00	36094

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

3.4.3 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE ARCA TRADES: REDISTRIBUTION FEE	$750.00	32212

3.4.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCA TRADES: NON-DISPLAY CATEGORY 1	$2,000.00	38121
Non-Display Fee – Category 2	NYSE ARCA TRADES: NON-DISPLAY CATEGORY 2	$2,000.00	38122
Non-Display Fee – Category 3	NYSE ARCA TRADES: NON-DISPLAY CATEGORY 3	$2,000.00	38123
Non-Display No Non-Display	NYSE ARCA TRADES: NO NON-DISPLAY	$0.00	38177
Non-Display Declaration Late Fee	NYSE ARCA TRADES: LATE NON-DISPLAY	$1,000.00	32486

3.4.5 Subscriber Fee/Enterprise Fee

Description	Product Name	Rate	Product Code
Professional User Fee	NYSE ARCA TRADES: PRO DEVICE	$4.00	32402
Non Professional User	NYSE ARCA TRADES: NON PRO DEVICE	$0.25	32958
Enterprise Fee[2]	NYSE ARCA TRADES: ENTERPRISE FEE	$34,500.00	32959

[2] A single Enterprise fee will apply for clients with both NYSE Arca BBO and NYSE Arca Trades Enterprise Licenses

3.4.6 Digital Media Fee

Description	Product Name	Rate	Product Code
Digital Media Enterprise Fee	NYSE ARCA TRADES: DIGITAL MEDIA ENTERPRISE FEE	$20,000.00	32202

3.4.7 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE Arca Trades Data Feed	NYSE ARCA TRADES: DATAFEED	$0.00	37047

*Access Fee will apply for the receipt of this products via a datafeed delivery

3.5 NYSE Arca Order Imbalance

For more details, see: http://www.nyxdata.com/nysedata/Default.aspx?tabid=1417

3.5.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Arca Order Imbalance Access Fee	NYSE ARCA ORDER IMBALANCE: ACCESS FEE	$500.00	37102

3.5.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Arca Order Imbalance Multiple Data Feed Fee	NYSE ARCA ORDER IMBALANCE: MULTIPLE DATA FEED FEE	$200.00	37109

NYSE

3.5.3   Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE Arca Order Imbalance Redistribution Fee	NYSE ARCA ORDER IMBALANCE: REDISTRIBUTION FEE	$0.00	37103

3.5.4   Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCA ORDER IMBALANCE: NON-DISPLAY CATEGORY 1	$500.00	37104
Non-Display Fee – Category 2	NYSE ARCA ORDER IMBALANCE: NON-DISPLAY CATEGORY 2	$500.00	37105
Non-Display Fee – Category 3	NYSE ARCA ORDER IMBALANCE: NON-DISPLAY CATEGORY 3	$500.00	37106
Non-Display Fee – No Non-Display	NYSE ARCA ORDER IMBALANCE: NO NON-DISPLAY	$0.00	37107
Non-Display Declaration Late Fee	NYSE ARCA ORDER IMBALANCE: LATE NON-DISPLAY DECLARATION	$1,000.00	

3.5.5   Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE Arca Order Imbalance Data Feed	NYSE ARCA DATAFEED - ORDER IMBALANCES	$0.00	37108

*Access Fee will apply for the receipt of this product via a datafeed delivery

4   NYSE Options

4.1   NYSE Arca Options

NYSE Arca Options includes the following products:
- NYSE Arca Options - Complex
- NYSE Arca Options - Deep
- NYSE Arca Options - Top

For more details, see: **http://www.nyxdata.com/nysedata/Default.aspx?tabid=1170**

4.1.1   Access Fee

Description	Product Name	Rate	Product Code
NYSE Arca Options Access Fee	NYSE ARCA OPTIONS: ACCESS FEE	$3,000.00	39110

4.1.2   Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Arca Options Multiple Data Feed Fee	NYSE ARCA OPTIONS: MULTIPLE DATA FEED FEE	$200.00	36096

4.1.3   Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE ARCA OPTIONS: REDISTRIBUTION FEE	$2,000.00	39111

4.1.4   Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCA OPTIONS: NON-DISPLAY CATEGORY 1	$5,000.00	38139
Non-Display Fee – Category 2	NYSE ARCA OPTIONS: NON-DISPLAY CATEGORY 2	$5,000.00	38140
Non-Display Fee – Category 3 (Per Platform)	NYSE ARCA OPTIONS: NON-DISPLAY CATEGORY 3	$5,000.00 Cap:$15,000.00	38141
Non-Display Fee – No Non-Display	NYSE ARCA OPTIONS: NO NON-DISPLAY	$0.00	38183

4.1.5   Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE ARCA OPTIONS: PRO DEVICE	$50.00	39112
Non Professional User Fee (Per User)	NYSE ARCA OPTIONS: NON PRO DEVICE	$1.00	39113
Non Professional User Fee Cap	NYSE ARCA OPTIONS: NON PRO CAP	$5,000.00	
Per Quote	N/A	Not Offered	N/A

4.1.6   Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Arca Options Deep Data Feed	NYSE ARCA OPTIONS - DEPTH OF BOOK: DATAFEED	$0.00	37083
NYSE Arca Options Top Data Feed	NYSE ARCA OPTIONS - TOP OF BOOK: DATAFEED	$0.00	37085
NYSE Arca Options Complex Data Feed	NYSE ARCA OPTIONS - COMPLEX: DATAFEED	$0.00	37046

4.2 NYSE Arca Options – Complex Order Book

4.2.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Arca Options Complex Order Book Access Fee*	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: ACCESS FEE	$1,500.00	37061

*A single Access Fee of $3,000.00 will apply for clients receiving both NYSE Arca Options and NYSE Arca Options – Complex Order Book.

4.2.2 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: REDISTRIBUTION FEE	$1,000.00	37062

4.2.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: NON-DISPLAY CATEGORY 1	$1,000.00	37065
Non-Display Fee – Category 2	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: NON-DISPLAY CATEGORY 2	$1,000.00	37089
Non-Display Fee – Category 3 (Per Platform)	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: NON-DISPLAY CATEGORY 3	$1,000.00 Cap:$3,000	37090
Non-Display Fee – No Non-Display	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: NO NON-DISPLAY	$0.00	37091

4.2.4 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: PRO DEVICE	$20.00	37063
Non Professional User Fee (Per User)	NYSE ARCA OPTIONS COMPLEX ORDER BOOK: NON PRO DEVICE	$1.00	37064

4.2.5 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Arca Options Complex Options Data Feed	NYSE ARCA OPTIONS - COMPLEX: DATAFEED	$0.00	37046

*Access Fee will apply for the receipt of these products via a datafeed delivery

4.3 NYSE Amex Options

NYSE Amex Options includes the following products:

- ArcaBook for Amex Options - Complex
- ArcaBook for Amex Options - Deep
- ArcaBook for Amex Options - Top

For more details, see: http://www.nyxdata.com/nysedata/Default.aspx?tabid=1165

4.3.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Amex Options Access Fee	NYSE AMEX OPTIONS: ACCESS FEE	$3,000.00	39100

4.3.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
NYSE Amex Options Multiple Data Feed Fee	NYSE AMEX OPTIONS: MULTIPLE DATA FEED FEE	$200.00	36095

4.3.3 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE AMEX OPTIONS: REDISTRIBUTION FEE	$2,000.00	39101

4.3.4 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE AMEX OPTIONS: NON-DISPLAY CATEGORY 1	$5,000.00	38136
Non-Display Fee – Category 2	NYSE AMEX OPTIONS: NON-DISPLAY CATEGORY 2	$5,000.00	38137
Non-Display Fee – Category 3 (Per Platform)	NYSE AMEX OPTIONS: NON-DISPLAY CATEGORY 3	$5,000.00 Cap:$15,000	38138
Non-Display Fee – No Non-Display	NYSE AMEX OPTIONS: NO NON-DISPLAY	$0.00	38182

4.3.5 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE AMEX OPTIONS: PRO DEVICE	$50.00	39102
Non Professional User Fee (Per User)	NYSE AMEX OPTIONS: NON PRO DEVICE	$1.00	39103
Non Professional User Fee Cap	NYSE AMEX OPTIONS: NON PRO CAP	$5,000.00	
Per Quote	N/A	Not Offered	N/A

4.3.6 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Amex Options Deep Data Feed	NYSE AMEX OPTIONS -DEEP: DATAFEED	$0.00	37073
NYSE Amex Options Top Data Feed	NYSE AMEX OPTIONS TOP: DATAFEED	$0.00	37075

*Access Fee will apply for the receipt of these products via a datafeed delivery

4.4 NYSE Amex Options – Complex Order Book

4.4.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE Amex Complex Options Access Fee*	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: ACCESS FEE	$1,500.00	37056

*A single Access Fee of $3,000.00 will apply for clients receiving both NYSE Amex Options and NYSE Amex Options – Complex Order Book.

4.4.2 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: REDISTRIBUTION FEE	$1,000.00	37057

4.4.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: NON-DISPLAY CATEGORY 1	$1,000.00	37060
Non-Display Fee – Category 2	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: NON-DISPLAY CATEGORY 2	$1,000.00	37086
Non-Display Fee – Category 3 (Per Platform)	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: NON-DISPLAY CATEGORY 3	$1,000.00 Cap:$3,000	37087
Non-Display Fee – No Non-Display	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: NO NON-DISPLAY	$0.00	37088

4.4.4 Subscriber Fee

Description	Product Name	Rate	Product Code
Professional User Fee (Per User)	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: PRO DEVICE	$20.00	37058
Non Professional User Fee (Per User)	NYSE AMEX OPTIONS COMPLEX ORDER BOOK: NON PRO DEVICE	$1.00	37059

4.4.5 Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Amex Options Complex Options Data Feed	NYSE AMEX OPTIONS - COMPLEX: DATAFEED	$0.00	37071

*Access Fee will apply for the receipt of these products via a datafeed delivery

5 NYSE Best Quotes and Trades

5.1 NYSE Best Quote and Trades (BQT)

For more details, see: http://www.nyxdata.com/Data-Products/NYSE-Best-Quote-and-Trades

5.1.1 Access Fee

Description	Product Name	Rate	Product Code
NYSE BQT Access Fee[‡]	NYSE BQT: ACCESS FEE	$7,000.00*	32450
*The Access fee for NYSE BQT is consist of the following:			
NYSE BQT Access Fee	$1,000.00		
NYSE BBO and NYSE Trades Access Fee	$3,000.00		
NYSE Arca BBO and NYSE Arca Trades Access Fee	$1,500.00		
NYSE MKT BBO and NYSE MKT Trades Access Fee	$1,500.00		
Access Fee for NYSE BQT recipients	**$7,000.00**		

[‡]Customers already being charged access Fee for any of the underlying Trades and BBO feeds will NOT be charged more than a single Trade or BBO access fee for each product for the receipt of a NYSE BQT datafeed.

5.1.2 Redistribution Fee

Description	Product Name	Rate	Product Code
NYSE BQT Redistribution Fee[‡]	NYSE BQT: REDISTRIBUTION FEE	$2,500.00*	32451
*The Redistribution fee for NYSE BQT is consist of the following:			
NYSE Trades Redistribution Fee	$1,000.00		
NYSE Arca Trades Redistribution Fee	$750.00		
NYSE MKT Trades Redistribution Fee	$750.00		
Redistribution fee for NYSE BQT recipients	**$2,500.00**		

[‡]Customers already being charged redistribution Fee for any of the underlying Trades feeds will NOT be charged more than a single Trade redistribution fee for each product for the receipt of a NYSE BQT datafeed.

5.1.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE BQT: NON-DISPLAY CATEGORY 1	$9,500.00	32457
Non-Display Fee – Category 2	NYSE BQT: NON-DISPLAY CATEGORY 2	$9,500.00	32458
Non-Display Fee – Category 3 (Per Platform)	NYSE BQT: NON-DISPLAY CATEGORY 3	$9,500.00 Cap:$28,500.00	32459
Non-Display Fee – No Non-Display	NYSE BQT: NO NON-DISPLAY	$0.00	32460

5.1.4 User Fee

Description	Product Name	Rate	Product Code
Professional User/Device	NYSE BQT: PRO DEVICE	$18.00	32452
Non Professional User/Device	NYSE BQT: NON PRO DEVICE	$1.00	32453
Enterprise Fee	NYSE BQT: ENTERPRISE FEE	$75,000.00	32454

5.1.5 Data Feed Marker*

Description	Product Name	Rate	Product Code
NYSE BQT Data Feed	NYSE BQT: DATAFEED	$0.00	32455

*Access Fee will apply for the receipt of this product via a datafeed delivery

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

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6 NYSE BONDS

6.1 NYSE BONDS

6.1.1 Data Feed Markers

Description	Product Name	Rate	Product Code
NYSE BONDS Level 1 Data Feed	NYSE BONDS LEVEL 1: DATAFEED	$0.00	37030
NYSE BONDS Trades Data Feed	NYSE BONDS TRADES: DATAFEED	$0.00	37052
NYSE BONDS Level 2 Data Feed	NYSE BONDS LEVEL 2: DATAFEED	$0.00	37022

7 NYSE Global Index Data

7.1 NYSE Global Index Service

For more details, see: http://www.nyxdata.com/nysedata/Default.aspx?tabid=1000

7.1.1 Access Fee

Description	Product Name	Rate	Product Code
Access Fee for Real-Time Data Feed	NYSE GLOBAL INDEX FEED: ACCESS FEE	$1,275.00	32596
Access Fee for Delayed Data Feed	NYSE GLOBAL INDEX FEED: DELAYED ACCESS FEE	$600.00	32574

7.1.2 Multiple Data Feed Fee

Description	Product Name	Rate	Product Code
Multiple Data Feed Fee for Real-Time and/or Delayed Data Feed	NYSE GLOBAL INDEX FEED: MULTIPLE DATA FEED FEE	$200.00	36111

7.1.2 Redistribution Fee

Description	Product Name	Rate	Product Code
Redistribution Fee	NYSE GLOBAL INDEX FEED: REDISTRIBUTION FEE	$1,200.00	32617

7.1.3 Non-Display Fee (See Appendix)

Description	Product Name	Rate	Product Code
Non-Display Fee – Category 1	NYSE GLOBAL INDEX FEED: NON-DISPLAY CATEGORY 1	$2,000.00	38142
Non-Display Fee – Category 2	NYSE GLOBAL INDEX FEED: NON-DISPLAY CATEGORY 2	$2,000.00	38143
Non-Display Fee – Category 3 (Per Platform)	NYSE GLOBAL INDEX FEED: NON-DISPLAY CATEGORY 3	$2,000.00 Cap:$6,000.00	38144
Non-Display Fee – No Non-Display	NYSE GLOBAL INDEX FEED: NO NON-DISPLAY	$0.00	38184

7.1.4 User Fee

Description	Product Name	Rate	Product Code

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

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Professional User Fee (Per User) - (Real-time ONLY)	NYSE GLOBAL INDEX FEED: PRO DEVICE	$17.00	32597
Non Professional User Fee (Per User) - (Real-time ONLY)	NYSE GLOBAL INDEX FEED: NON PRO DEVICE	$1.00	32598
TV Ticker	NYSE GLOBAL INDEX FEED: TV TICKER	$2,500.00	32575
Delayed Data Use Fee	NYSE GLOBAL INDEX FEED: DELAYED DATA-USE FEE	$600.00	32616
Delayed Hosted Solution (Per Site)	NYSE GLOBAL INDEX FEED: DELAYED HOSTED SOLUTION	$600.00	32611
Delayed Hosted Solution- Indirect Bill (Per Site)	NYSE GLOBAL INDEX FEED: HOSTED SOLUTION INDIRECT BILL	$600.00	32612

7.1.5   Enterprise Fee

Description	Product Name	Rate	Product Code
Enterprise License (includes all internal Users, External Pros & Non Pros)			
Enterprise Fee (for Broker/Dealers ONLY) – Professionals and Non Professional	NYSE GLOBAL INDEX FEED: ENTERPRISE FEE	$17,500.00	32613

7.1.6   Data Feed Markers*

Description	Product Name	Rate	Product Code
NYSE Global Index Real Time Feed Data Feed	NYSE GLOBAL INDEX FEED: DATAFEED	$0.00	37051
NYSE Global Index Delayed Feed Data Feed	NYSE GLOBAL INDEX FEED: DELAYED DATAFEED	$0.00	32573

*Access Fee will apply for the receipt of this product via a datafeed delivery

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

NYSE

8 Global OTC

For more details, see: http://www.nyxdata.com/nysedata/Default.aspx?tabid=12102.8

8.1 GLOBAL OTC BBO

8.1.1 Access Fee

Description	Product Name	Rate	Product Code
Global OTC BBO Access Fee	GLOBAL OTC BBO: REDISTRIBUTION FEE	$0.00	39079

8.1.2 Redistribution Fee

Description	Product Name	Rate	Product Code
Global OTC BBO Redistribution Fee	GLOBAL OTC BBO: REDISTRIBUTION FEE	$0.00	39081

8.1.3 User Fee

Description	Product Name	Rate	Product Code
Professional Device Fee	GLOBAL OTC BBO: PRO DEVICE	$0.00	39080
Professional Device Indirect Fee	GLOBAL OTC BBO: PRO DEVICE INDIRECT	$0.00	69008
Nonprofessional Device Fee	GLOBAL OTC BBO: NON PRO DEVICE	$0.00	39082

8.1.4 Data Feed Markers*

Description	Product Name	Rate	Product Code
*Global OTC BBO Data Feed	GLOBAL OTC BBO: DATAFEED	$0.00	39083

*Access Fees will apply for the receipt of this product via a datafeed delivery

8.2 GLOBAL OTC INTEGRATED FEED

8.2.1 Access Fee

Description	Product Name	Rate	Product Code
Global OTC Integrated Access Fee	GLOBAL OTC INTEGRATED: ACCESS FEE	$0.00	39074

8.2.2 Redistribution Fee

Description	Product Name	Rate	Product Code
Global OTC Integrated Redistribution Fee	GLOBAL OTC INTEGRATED: REDISTRIBUTION FEE	$0.00	39076

8.2.3 User Fee

Description	Product Name	Rate	Product Code
Professional Device Fee	GLOBAL OTC INTEGRATED: PRO DEVICE	$0.00	39075
Professional Device Indirect Fee	GLOBAL OTC INTEGRATED: PRO DEVICE INDIRECT	$0.00	69009
Nonprofessional Device Fee	GLOBAL OTC INTEGRATED: NON PRO DEVICE	$0.00	39077

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

8.2.4 Data Feed Markers*

Description	Product Name	Rate	Product Code
*Global OTC Integrated Data Feed	GLOBAL OTC INTEGRATED: DATAFEED	$0.00	39078

*Access Fee will apply for the receipt of this product via a datafeed delivery

9. Appendix

Please contact sales-pdp@theice.com for more information.

NON-DISPLAY USE FEES

EQUITIES

Product	Category 1 (per month)	Category 2 (per month)	Category 1 (per month/per platform)
NYSE OpenBook [2]	$6,000	$6,000	$6,000
NYSE BBO	$1,500	$1,500	$1,500
NYSE Trades	$3,000	$3,000	$3,000
NYSE Order Imbalances	$2,000	$2,000	$2,000
NYSE Integrated Feed [6]	$20,000	$20,000	$20,000
NYSE Arca Integrated Feed [3]	$7,000	$7,000	$7,000
NYSE ArcaBook [4]	$5,000	$5,000	$5,000
NYSE Arca BBO	$1,000	$1,000	$1,000
NYSE Arca Trades	$2,000	$2,000	$2,000
NYSE MKT OpenBook [5]	$2,000	$2,000	$2,000
NYSE MKT BBO	$500	$500	$500
NYSE MKT Trades	$1,500	$1,500	$1,500

Please contact your NYSE Market Data Administration Account Manager directly to answer any specific questions on policies relating NYSE Market Data Fees. All Fees are monthly.

Fees set forth in this document from section 1 to 6 and the related footnotes reflect Fees that have been filed with the Securities and Exchange Commission and may be amended, supplemented or eliminated by subsequent Fee filings or by potential SEC actions on Fee filings.

NYSE

NYSE MKT Order Imbalances	$500	$500	$500
NYSE MKT Integrated Feed [7]	$5,000	$5,000	$5,000

1   The Non-Display fees for Category 3 will be charged on the first three (3) platforms declared.

2   The Non-Display fees for NYSE OpenBook Feed cover all Non-Display use of NYSE BBO and NYSE Order Imbalances when declared within the same category.

3   The Non-Display fees for NYSE Arca Integrated Feed cover all Non-Display use of NYSE ArcaBook, NYSE Arca BBO and NYSE ArcaTrades when declared within the same category.

4   The Non-Display fees for NYSE ArcaBook Feed cover all Non-Display use of NYSE ArcaBook BBO when declared within the same category

5   The Non-Display fees for NYSE MKT OpenBook Feed cover all Non-Display use of NYSE MKT BBO and NYSE MKT Order Imbalances when declared within the same category

6   Fees pending effectiveness of SEC filings. The Non-Display fees for NYSE Integrated Feed cover all Non-Display use of NYSE BBO, NYSE Trades, NYSE OpenBook and NYSE Order Imbalances when declared within the same category.

7   Fees pending effectiveness of SEC filings. The Non-Display fees for NYSE MKT Integrated Feed cover all Non-Display use of NYSE MKT BBO, NYSE MKT Trades, NYSE MKT OpenBook and NYSE MKT Order Imbalances when declared within the same category.

OPTIONS

Product	Category 1 (per month)	Category 2 [1] (per month)	Category 3 (per month/per platform [2])
NYSE Amex Options	$5,000	$5,000	$5,000
NYSE Amex Options Complex Order Book	$1,000	$1,000	$1,000
NYSE Arca Options	$5,000	$5,000	$5,000
NYSE Arca Options Complex Order Book	$1,000	$1,000	$1,000

1   Data recipients will not be liable for Category 2 Non-Display fees for which they are also paying Category 1 fees.

2   The Non-Display fees for Category 3 will be charged on the first three (3) platforms declared.

INDICES

NYSE

Product	Category 1 (per month)	Category 2 (per month)	Category 3 (per month/per platform)
NYSE Global Index Feed	$2,000	$2,000	$2,000

GENERAL

- A flat fee per NYSE Market Data product per organization applies. Fees apply on an enterprise-wide basis to the organization, any of its holding companies and its subsidiaries. For the purposes of this section, a subsidiary means a company in which the user owns directly or indirectly 50% (fifty percent) or more of the issued share capital and over which it exercises effective control.

- Data recipients of US Equities, US Options and US Indices for Category 3 are required to declare their platform(s). Data recipients are liable for Non-Display fees for up to three (3) of the platforms declared.

- All fees set forth in this Non-Display Fee Schedule are in addition to access fees, license fees, user fees or other fees that are otherwise payable in respect of the applicable NYSE Market Data products in accordance with other NYSE Agreements, policies and/or price lists.

- Please refer to the NYSE Market Data Non-Display Use Policy for additional details on Non-Display Use.

Cboe EDGX U.S. Equities Exchange Fee Schedule

Effective October 3, 2018

Transaction Fees:

- Rebates indicated by parentheses ( ).
- The rates listed in the Standard Rates table apply unless a Member's transaction is assigned a fee code other than a standard fee code. If a Member's transaction is assigned a fee code other than a standard fee code, the rates listed in the Fee Codes table will apply.
- Footnotes provide further explanatory text or, where annotated to fee codes, indicate variable rate changes, provided the conditions in the footnote are met.
- Unless otherwise noted, all routing fees or rebates in the Fee Codes and Associated Fees table are for removing liquidity from the destination venue.

Standard Rates:

Category	Adding Liquidity	Removing Liquidity	Routing and Removing Liquidity
Securities at or above $1.00	$(0.0020)[1]	$0.0030	$0.0030
Securities below $1.00	$(0.00003)	0.30% of Dollar Value	0.30% of Dollar Value
Standard Fee Codes	B, V, Y, 3, 4	N, W, 6, BB, PR, ZR	X

Fee Codes and Associated Fees:

Oct 18, 2018 | [Download CSV](#) | [Copy To Clipboard](#)

Fee Code	Description	Fee/(Rebate) Securities at or above $1.00	Fee/(Rebate) Securities below $1.00
10	Routed to NYSE Arca, adds liquidity (Tape B)	(0.00220)	FREE
2	Routed to NASDAQ using INET routing strategy (Tape B)	0.00300	0.30% of Dollar Value
3[1]	Adds liquidity to EDGX, pre and post market (Tapes A or C)	(0.00200)	(0.00003)

Fee Code	Description	Fee/(Rebate) Securities at or above $1.00	Fee/(Rebate) Securities below $1.00
4[1,2]	Adds liquidity to EDGX, pre and post market (Tape B)	(0.00200)	(0.00003)
6	Removes liquidity from EDGX, pre and post market (All Tapes)	0.00300	0.30% of Dollar Value
7	Routed, pre and post market	0.00300	0.30% of Dollar Value
8	Routed to NYSE American, adds liquidity	0.00020	FREE
9	Routed to NYSE Arca, adds liquidity (Tapes A or C)	(0.00210)	FREE
A	Routed to NASDAQ, adds liquidity	(0.00150)	FREE
AA	Routed to EDGA using ALLB routing strategy	0.00030	FREE
AY	Routed to BYX using ALLB routing strategy	(0.00150)	0.10% of Dollar Value
AZ	Routed to BZX using ALLB routing strategy	0.00300	0.30% of Dollar Value
B[1,2]	Adds liquidity to EDGX (Tape B)	(0.00200)	(0.00003)
BB	Removes liquidity from EDGX (Tape B)	0.00300	0.30% of Dollar Value
BY	Routed to BYX using Destination Specific ("DIRC"), ROUC or ROUE routing strategy	(0.00150)	0.10% of Dollar Value
C	Routed to BX	(0.00110)	0.10% of Dollar Value
CL[9]	Routed to listing market closing process, except for NYSE Arca & BZX	0.00100	0.30% of Dollar Value
D	Routed to NYSE or routed using RDOT routing strategy	0.00280	0.30% of Dollar Value
DM	Adds liquidity using MidPoint Discretionary order within discretionary range	(0.00150)	(0.00003)
EA[7]	Internalization, adds liquidity	0.00050	0.15% of Dollar Value
ER[7]	Internalization, removes liquidity	0.00050	0.15% of Dollar Value
F	Routed to NYSE, adds liquidity	(0.00150)	FREE
G	Routed to NYSE Arca (Tapes A or C)	0.00300	0.30% of Dollar Value
HA[11]	Non-displayed order, adds liquidity	(0.00150)	(0.00003)
HI[11]	Non-displayed order that receives price improvement, adds liquidity	FREE	FREE
I	Routed to EDGA	0.00290	0.30% of Dollar Value
J	Routed to NASDAQ	0.00300	0.30% of Dollar Value
K	Routed to PSX using ROUC or ROUE routing strategy	0.00290	0.30% of Dollar Value
L		0.00300	0.30% of Dollar Value

Fee Code	Description	Fee/(Rebate) Securities at or above $1.00	Fee/(Rebate) Securities below $1.00
	Routed to NASDAQ using INET routing strategy (Tapes A or C)		
MM	Non-displayed order, adds liquidity using Mid-Point Peg	(0.00150)	(0.00003)
N	Removes liquidity from EDGX (Tape C)	0.00300	0.30% of Dollar Value
NA	Routed to BZX, NYSE, NYSE Arca or Nasdaq; adds non-displayed liquidity	FREE	FREE
NB	Routed to any exchange not covered by Fee Code NA, adds non-displayed liquidity	0.00300	0.30% of Dollar Value
O[5]	Routed to listing market opening or re-opening cross	0.00100	0.30% of Dollar Value
OO	EDGX Opening or Re-Opening	0.00100	FREE
PR	Removes liquidity from EDGX using ROUQ routing strategy	0.00300	0.30% of Dollar Value
Q	Routed to a non-exchange destination using ROUC routing strategy	0.00200	0.30% of Dollar Value
R	Re-routed by NYSE	0.00300	0.30% of Dollar Value
RA	Routed to EDGA, adds liquidity	0.00030	FREE
RB	Routed to BX, adds liquidity	0.00200	FREE
RN	Routed to NASDAQ using ROOC routing strategy, adds liquidity	(0.00150)	FREE
RP	Non-displayed order, adds liquidity using Supplemental Peg	(0.00150)	(0.00003)
RQ	Routed using ROUQ routing strategy	0.00290	0.30% of Dollar Value
RR	Routed to EDGA using DIRC routing strategy	0.00030	0.30% of Dollar Value
RT	Routed using ROUT routing strategy	0.00300	0.30% of Dollar Value
RX	Routed using ROUX routing strategy	0.00300	0.30% of Dollar Value
RY	Routed to BYX, adds liquidity	0.00180	FREE
RZ	Routed to BZX, adds liquidity	(0.00200)	FREE
S	Directed ISO	0.00320	0.30% of Dollar Value
SW[8]	Routed using SWPA/SWPB routing strategy (except for removal of liquidity from NYSE)	0.00310	0.30% of Dollar Value
T	Routed to a non-exchange destination using ROUD or ROUE routing strategy	0.00120	0.30% of Dollar Value
V[1]	Adds liquidity to EDGX (Tape A)	(0.00200)	(0.00003)
VI		FREE	FREE

Fee Code	Description	Fee/(Rebate) Securities at or above $1.00	Fee/(Rebate) Securities below $1.00
	Displayed order subject to price sliding that receives price improvement, adds liquidity		
W	Removes liquidity from EDGX (Tape A)	0.00300	0.30% of Dollar Value
X	Routed	0.00300	0.30% of Dollar Value
Y[1]	Adds liquidity to EDGX (Tape C)	(0.00200)	(0.00003)
Z	Routed to a non-exchange destination using ROUZ routing strategy	0.00120	0.30% of Dollar Value
ZA	Retail Order, adds liquidity	(0.00320)	(0.00003)
ZR	Retail Order, removes liquidity	0.00300	0.30% of Dollar Value

Definitions:

- ADAV means average daily added volume calculated as the number of shares added per day and ADV means average daily volume calculated as the number of shares added to, removed from, or routed by, the Exchange, or any combination or subset thereof, per day. ADAV and ADV is calculated on a monthly basis.
  - The Exchange excludes from its calculation of ADAV and ADV shares added, removed, or routed on any day that the Exchange's system experiences a disruption that lasts for more than 60 minutes during Regular Trading Hours ("Exchange System Disruption"), on any day with a scheduled early market close, and on the last Friday in June (the "Russell Reconstitution Day").
  - With prior notice to the Exchange, a Member may aggregate ADAV and ADV with other Members that control, are controlled by, or are under common control with such Member (as evidenced on such Member's Form BD).
- Step-Up Add TCV means ADAV as a percentage of TCV in the relevant baseline month subtracted from current ADAV as a percentage of TCV.
- OCC Customer Volume or OCV means, for purposes of equities pricing, the total equity and ETF options volume that clears in the Customer range at the Options Clearing Corporation ("OCC") for the month for which the fees apply, excluding volume on any day that the Exchange experiences an Exchange System Disruption and on any day with a scheduled early market close, using the definition of Customer as provided under the Exchange's fee schedule for EDGX Options.
- TCV means total consolidated volume calculated as the volume reported by all exchanges and trade reporting facilities to a consolidated transaction reporting plan for the month for which the fees apply.

- The Exchange excludes from its calculation of TCV volume on any day that the Exchange experiences an Exchange System Disruption, on any day with a scheduled early market close, and the Russell Reconstitution Day.

General Notes:

- Unless otherwise indicated, rebates and charges for adding, removing or routing liquidity are listed as per share rebates and charges.
- The Exchange notes that to the extent a Member does not qualify for any of the tiers listed below, the rates listed in the above section titled "Fee Codes and Associated Fees" will apply.
- To the extent a Member qualifies for higher rebates and/or lower fees than those provided by a tier for which such Member qualifies, the higher rebates and/or lower fees shall apply.
- Variable rates provided by tiers apply only to executions in securities priced at or above $1.00.
- Fee codes applicable to orders routed to NYSE Arca will be applied to orders routed to the NYSE or NYSE American where, pursuant to NYSE and NYSE American Rule 49, the NYSE or NYSE American have designated NYSE Arca as their backup facility to receive and process bids and offers and to execute orders on behalf of the NYSE or NYSE American.

Footnotes:

[1] Add Volume Tiers:

The rebates to add provided by the below add volume tiers are applicable to the following fee codes: B, V, Y, 3 and 4.

Tier	Rebate Per Share to Add	Required Criteria
Mega Tier 1	($0.0032)	Member adds an ADV ≥ 0.75% of the TCV.
Mega Tier 2	($0.0031)	Member adds an ADV ≥ 0.45% of the TCV.
Ultra Tier	($0.0030)	Member adds an ADV ≥ 0.30% of the TCV.
Super Tier	($0.0028)	Member adds an ADV ≥ 0.15% of the TCV.
Growth Tier	($0.0025)	Member adds an ADV ≥ 0.08% of the TCV.
Investor Tier	($0.0032)	(1) Member adds an ADV ≥ 0.20% of the TCV; and (2) Member has an "added liquidity" as a percentage of "added plus removed liquidity" ≥ 85%.

² Tape B Volume Tier:

The rebates to add provided by the below tiers are applicable to the following fee codes: B and 4.

Tier	Rebate Per Share to Add	Required Criteria
Tier 1	($0.0027)	Member adds an ADV ≥ 0.03% of the TCV in Tape B securities.

³ Reserved

⁴ The Exchange notes that Members will only be able to designate their orders as Retail Orders on either an order-by-order basis using FIX ports or by designating certain of their FIX ports at the Exchange as "Retail Order Ports."

⁵ Capped at $35,000 per month per Member.

⁶ Reserved.

⁷ If a Member adds an ADV of at least 10,000,000 shares, then the Member's rate for internalization (fee codes EA or ER) decreases to $0.0001 per share per side.

⁸ Fee code D will be yielded if an SWPA or SWPB routing strategy removes liquidity from NYSE.

⁹ Fee code O will be yielded if an order is routed to NYSE Arca & BZX's closing processes.

¹⁰ Reserved.

¹¹ The fee or rebate for adding non-displayed liquidity does not apply to the Reserve Quantity of an order or an order with a Discretionary Range instruction.

Late Fees:

A charge of 1% per month on the past due portion of the balance will be assessed on a Member's account that is past due. This fee will begin to accrue on a daily basis for items not paid within the 30 day payment terms until the item is paid in full. Late fees incurred will be included as line items on subsequent invoices.

Logical Port Fees:

Service	Fee
Logical Ports (excluding Purge Port, Multicast PITCH Spin Server Port or GRP Port)	$550/port/month
Purge Ports	$650/port/month
Multicast PITCH Spin Server	$550/set of primary (A or C feed)
Multicast PITCH GRP Ports	$550/primary (A or C feed)

- Logical port fees are limited to logical ports within the primary data center. No logical port fees will be assessed for redundant secondary data center ports.
- Multicast PITCH is available through one of two primary feeds, either the A or C feed. All secondary feed Multicast PITCH Spin Server and GRP Ports are provided for redundancy at no additional cost.
- New requests will be prorated for the first month of service. Cancellation requests are billed in full month increments as firms are required to pay for the service for the remainder of the month, unless the session is terminated within the first month of service.

Physical Connectivity Fees:

Service	Fee per Physical Port
1 Gb physical port	$2,500/month
10 Gb physical port	$7,500/month
1 Gb physical port (Disaster Recovery)	$2,000/month
10 Gb physical port (Disaster Recovery)	$6,000/month

Note: The Exchange will pass-through in full any fees or costs in excess of $1,000.00 incurred by the Exchange to complete a cross-connect.

Membership Fees:

Membership Fee Type	Fee
Firm Membership	$2,500/year[1]

[1] If a Member is pending a voluntary termination of rights as a Member pursuant to Rule 2.8 prior to the date any Annual Membership Fee for a given year will be assessed (i.e., September 1, 2011, January 1, 2012, etc.) and the Member does not utilize the facilities of EDGX during such time, then the Member will not be obligated to pay the Annual Membership Fee.

Market Data Fees:

Definitions

- A Distributor of an Exchange Market Data product is any entity that receives the Exchange Market Data product directly from the Exchange or indirectly through another entity and then distributes it internally or externally to a third party.
- An Internal Distributor of an Exchange Market Data product is a Distributor that receives the Exchange Market Data product and then distributes that data to one or more Users within the Distributor's own entity.
- An External Distributor of an Exchange Market Data product is a Distributor that receives the Exchange Market Data product and then distributes that data to a third party or one or more Users outside the Distributor's own entity.
- A User of an Exchange Market Data product is a natural person, a proprietorship, corporation, partnership, or entity, or device (computer or other automated service), that is entitled to receive Exchange data.
- A "Non-Professional User" of an Exchange Market Data product is a natural person or qualifying trust that uses Data only for personal purposes and not for any commercial purpose and, for a natural person who works in the United States, is not: (i) registered or qualified in any capacity with the Securities and Exchange Commission, the Commodities Futures Trading Commission, any state securities agency, any securities exchange or association, or any commodities or futures contract market or association; (ii) engaged as an "investment adviser" as that term is defined in Section 202(a)(11) of the Investment Advisors Act of 1940 (whether or not registered or qualified under that Act); or (iii) employed by a bank or other organization exempt from registration under federal or state securities laws to perform functions that would require registration or qualification if such functions were performed for an organization not so exempt; or, for a natural person who works outside of the United States, does not perform the same functions as would disqualify such person as a Non-Professional User if he or she worked in the United States. A Professional User of an Exchange Market Data product is any User other than a Non-Professional User.
- A Professional User of an Exchange Market Data product is any User other than a Non-Professional User.
- Non-Display Usage means any method of accessing a Market Data product that involves access or use by a machine or automated device without access or use of a display by a natural person or persons.
- A Trading Platform is any execution platform operated as or by a registered National Securities Exchange (as defined in Section 3(a)(1) of the Exchange Act), an Alternative

Trading System (as defined in Rule 300(a) of Regulation ATS), or an Electronic Communications Network (as defined in Rule 600(b)(23) of Regulation NMS).

- A Managed Non-Display Service Provider is a Distributor that host a subscriber's applications that utilizes a Market Data Product within the Managed Non-Display Service Provider's space/cage; fully manages and controls access to the Market Data Product, and does not permit further redistribution of the Market Data Product internally or externally.
- A "White Label Service" is a type of hosted display solution in which a Distributor hosts or maintains a website or platform on behalf of a third-party entity. The service allows Distributors to make Derived Data available on a platform that is branded with a third-party brand, or co-branded with a third party and a Distributor. The Distributor maintains control of the application's data, entitlements and display.
- "Derived Data" is pricing data or other data that (i) is created in whole or in part from Exchange Data, (ii) is not an index or financial product, and (iii) cannot be readily reverse-engineered to recreate Exchange Data or used to create other data that is a reasonable facsimile or substitute for Exchange Data.

EDGX Depth:

Delivery	Fee
Internal Distributor	$1,500/month
External Distributor	$2,500/month
Non-Display Usage not by Trading Platforms*	$2,000/month
Non-Display Usage by Trading Platforms**	$5,000/month
Professional User Fee	$40.00/month
Non-Professional User Fee	$5.00/month
Enterprise Fee***	$100,000/month

External Distributors of EDGX Depth may also receive, upon request and at no additional External Distribution Fee, access to EDGX Top (as described in Rule 13.8(c)) or EDGX Last Sale (as described in Rule 13.8(d)) for External Distribution.

* Subscribers that use an Exchange approved Managed Non-Display Service Provider would be exempt from proposed Non-Display Usage Fee. In order to qualify for the exemption, the subscriber must meet the following requirements: (i) any subscriber applications that utilize EDGX Depth must be hosted within the Managed Non-Display Service Provider's space/cage; (ii) the subscriber's access to EDGX Depth is fully managed and controlled by the Managed Non-Display Service Provider, and no further redistribution of the Exchange Data internally or externally is permitted; and (iii) the subscriber is supported solely by one Managed Non-Display Service

Provider, is not hosted by multiple Managed Non-Display Service Providers, and does not have their own data center-hosted environment that also receives EDGX Depth.

** Fee is charged per subscriber that uses the data within a Trading Platform. The fee represents the maximum charge per subscriber regardless of the number of Trading Platforms operated by the subscriber that receives the data for Non-Display Usage.

*** As an alternative to User fees, a recipient firm may purchase a monthly Enterprise license to receive the EDGX Depth Feed from a Distributor for distribution to an unlimited number of Professional and Non-Professional Users. A recipient firm must pay a separate Enterprise Fee for each Distributor that controls the display of the EDGXX Depth Feed if it wishes such User to be covered by the Enterprise Fee. The Enterprise Fee is in addition to the Distributor Fee.

EDGX Depth Attributed:

In addition to EDGX Depth fees, as described above, all subscribers to EDGX Depth Attributed will also incur the following fees:

Delivery	Fee
Internal Distributor	$2,500/month
External Distributor	$5,000/month

EDGX Summary Depth:

Internal Distribution

Distribution Fee	$5,000/month
Professional User Fee	$0/month
Non-Professional User Fee	$0/month

External Distribution

Distribution Fee	$2,500/month*
Professional User Fee**	$5.00/month
Non-Professional User Fee**	$0.15/month
Enterprise Fee***	$30,000/month
Digital Media Enterprise Fee****	$7,500/month

* New External Distributor Credit. New External Distributors of the EDGX Summary Depth Feed will not be charged an External Distributor Fee for their first one (1) month in order to allow them to enlist new Users to receive the EDGX Summary Depth Feed.

** Each External Distributor will be eligible to receive a credit against its monthly Distributor Fee for the EDGX Summary Depth Feed equal to the amount of its monthly User Fees up to a maximum of the External Distributor Fee for the EDGX Summary Depth Feed.

*** As an alternative to User fees, a recipient firm may purchase a monthly Enterprise license to receive the EDGX Summary Depth Feed from an External Distributor for distribution to an unlimited number of Professional and Non-Professional Users. A recipient firm must pay a separate Enterprise Fee for each External Distributor that controls the display of the EDGX Summary Depth Feed if it wishes such User to be covered by the Enterprise Fee. The Enterprise Fee is in addition to the Distributor Fee.

**** As an alternative to User fees, a recipient firm may purchase a monthly Digital Media Enterprise license to receive the EDGX Summary Depth Feed from an External Distributor for distribution to an unlimited number of Users for viewing via television, websites, and mobile devices for informational and non-trading purposes only.

EDGX Book Viewer:*

Internal Distribution

Distribution Fee	$500/month
Professional User Fee	$0/month
Non-Professional User Fee	$0/month

External Distribution

Distribution Fee	$2,500/month
Professional User Fee**	$3.00/month
Non-Professional User Fee**	$0.15/month
Enterprise Fee***	$20,000/month
Digital Media Enterprise Fee****	$5,000/month

* Fees applicable for distribution other than viewing via this website.

** Each External Distributor will be eligible to receive a credit against its monthly Distributor Fee for EDGX Book Viewer equal to the amount of its monthly User Fees up to a maximum of the Distributor Fee for EDGX Book Viewer.

*** As an alternative to User fees, a recipient firm may purchase a monthly Enterprise license to receive EDGX Book Viewer from an External Distributor for distribution to an unlimited number of Professional and Non-Professional Users. A recipient firm must pay a separate Enterprise Fee for each External Distributor that controls the display of EDGX Book Viewer if it wishes such User to be covered by the Enterprise Fee.

**** As an alternative to User fees, a recipient firm may purchase a monthly Digital Media Enterprise license to receive EDGX Book Viewer from an External Distributor for distribution to an unlimited number of Users for viewing via television, websites, and mobile devices for informational and non-trading purposes only.

EDGX Top:

Internal Distribution

Distribution Fee	$500/month
Professional User Fee	$0/month
Non-Professional User Fee	$0/month

External Distribution

Distribution Fee	$1,500/month*
Professional User Fee**	$4.00/month
Non-Professional User Fee**	$0.10/month
Enterprise Fee***	$15,000/month
Digital Media Enterprise Fee****	$2,500/month

Subscribers to EDGX Top may also receive, upon request and at no additional charge, access to EDGX Last Sale (as described in Rule 13.8(d)).

*New External Distributor Credit. New External Distributors of EDGX Top will not be charged an External Distributor Fee for their first one (1) month.

** Each External Distributor will be eligible to receive a credit against its monthly Distributor Fee for EDGX Top equal to the amount of its monthly User Fees up to a maximum of the Distributor Fee for EDGX Top.

*** As an alternative to User fees, a recipient firm may purchase a monthly Enterprise license to receive EDGX Top from an External Distributor for distribution to an unlimited number of Professional and Non-Professional Users. A recipient firm must pay a separate Enterprise Fee for each External Distributor that controls the display of EDGX Top if it wishes such User to be covered by the Enterprise Fee.

**** As an alternative to User fees, a recipient firm may purchase a monthly Digital Media Enterprise license to receive EDGX Top from an External Distributor for distribution to an unlimited number of Users for viewing via television, websites, and mobile devices for informational and non-trading purposes only.

EDGX Top Derived Data White Label Service Program:*

External Subscriber Fee**	1-5 External Subscribers	$300 / month / External Subscriber
	6-10 External Subscribers	$250 / month / External Subscriber
	11+ External Subscribers	$200 / month / External Subscriber
Professional User Fee		$4.00 / month
Non-Professional User Fee		$0 / month

* A Distributor that provides a White Label Service for Derived Data taken from EDGX Top is liable for these fees instead of the fees normally applicable for the distribution of EDGX Top. A Distributor that provides a White Label Service for EDGX Top data that is not Derived Data or distributes Derived Data through a platform other than a White Label Service would be liable for the fees normally applicable for the distribution of EDGX Top.

** The External Subscriber Fee is non-progressive and is based on the number of White Label Service Platforms (i.e., "External Subscribers") that receive Derived Data from the Distributor. For example, a Distributor providing Derived Data based on EDGX Top to six External Subscribers would be charged a monthly fee of $1,500 (i.e., 6 External Subscribers x $250 each).

EDGX Last Sale:

Internal Distribution

Distribution Fee	$500/month
Professional User Fee	$0/month
Non-Professional User Fee	$0/month

External Distribution

Distribution Fee	$1,500/month*
Professional User Fee**	$4.00/month
Non-Professional User Fee**	$0.10/month
Enterprise Fee***	$15,000/month
Digital Media Enterprise Fee****	$2,500/month

Subscribers to EDGX Last Sale may also receive, upon request and at no additional charge, access to EDGX Top (as described in Rule 13.8(c)).

*New External Distributor Credit. New External Distributors of EDGX Last Sale will not be charged an External Distributor Fee for their first one (1) month.

** Each External Distributor will be eligible to receive a credit against its monthly Distributor Fee for EDGX Last Sale equal to the amount of its monthly User Fees up to a maximum of the Distributor Fee for EDGX Last Sale.

*** As an alternative to User fees, a recipient firm may purchase a monthly Enterprise license to receive EDGX Last Sale from an External Distributor for distribution to an unlimited number of Professional and Non-Professional Users. A recipient firm must pay a separate Enterprise Fee for each External Distributor that controls the display of EDGX Last Sale if it wishes such User to be covered by the Enterprise Fee.

**** As an alternative to User fees, a recipient firm may purchase a monthly Digital Media Enterprise license to receive EDGX Last Sale from an External Distributor for distribution to an unlimited number of Users for viewing via television, websites, and mobile devices for informational and non-trading purposes only.

EDGX Historical Depth Data:

Delivery (Internal Use Only)	Fee
Per Month of Access Data	$500
Per 1 TB Drive of Data	$2,500

Delivery (Internal Use Only)	Fee

Cboe One Feed℠:

Internal Distribution

	Cboe One Summary	Cboe One Premium
Distribution Fee	$1,500/month	$15,000/month
Professional User Fee	$10.00/month	$0/month
Non-Professional User Fee	$0.25/month	$0/month
Enterprise Fee***	$50,000/month	N/A

External Distribution""""

	Cboe One Summary	Cboe One Premium
Distribution Fee	$5,000/month*	$12,500/month
Professional User Fee**	$10/month	$15/month
Non-Professional User Fee**	$0.25/month	$0.50/month
Enterprise Fee***	$50,000/month	$100,000/month
Digital Media Enterprise Fee*****	$15,000/month	$25,000/month

*New External Distributor Credit. New External Distributors of the Cboe One Summary Feed will not be charged an External Distributor Fee for their first one (1) month in order to allow them to enlist new Users to receive the Cboe One Summary Feed.

**Each External Distributor will be eligible to receive a credit against its monthly Distributor Fee for the Cboe One Feed equal to the amount of its monthly User Fees up to a maximum of the External Distributor Fee for the Cboe One Feed.

***As an alternative to User fees, a recipient firm may purchase a monthly Enterprise license to receive the Cboe One Feed from a Distributor for distribution to an unlimited number of Professional and Non-Professional Users. A recipient firm must pay a separate Enterprise Fee for each Distributor that controls the display of the Cboe One Feed if it wishes such User to be covered by the Enterprise Fee. The Enterprise Fee is in addition to the Distributor Fee.

****Data Consolidation Fee. $1,000/month

*****As an alternative to User fees, a recipient firm may purchase a monthly Digital Media Enterprise license to receive the Cboe One Feed from an External Distributor for distribution to an unlimited number of Users for viewing via television, websites, and mobile devices for informational and non-trading purposes only.

Edge Attribution Incentive Program:

Members who enter Attributable Orders into the Exchange's System in at least 100 symbols over 10 consecutive trading days over the course of a month are eligible to participate in the Edge Attribution Incentive Program. Each month, the Exchange will set aside 25% of the revenue generated in connection with fees received from EdgeBook Attributed (the "Revenue Allotment"). From the Revenue Allotment, the Exchange will provide a payment to eligible Members who qualified for the Edge Attribution Incentive Program based on the percentage of executed share volume from their Attributable Orders entered into the Exchange's System.

Cboe Connect:

Market Data Connectivity*:

Data Feed	Fee Per Month
UQDF/UTDF/OMDF	$1,200
CQS/CTS	$1,400
OPRA	$4,500
Nasdaq Glimpse	$250
Nasdaq TotalView	$1,500
Nasdaq BX TotalView	$1,000
Nasdaq PSX TotalView	$750
NYSE OpenBook Ultra	$1,750
NYSE Integrated	$14,500
NYSE ArcaBook	$1,250
NYSE ArcaBook Refresh	$250
NYSE American OpenBook Ultra	$500
NYSE Alerts	$500
NYSE American Alerts	$500
NYSE Imbalances	$500

Data Feed	Fee Per Month
NYSE American Imbalances	$1,000
NYSE Trades	$500
NYSE Arca Trades	$500
NYSE American Trades	$1,000
BBDS/TDDS	$500
U.S. Equity Select + SIP Bundle (40% Discount)**	$5,910
OPRA + SIP Bundle (10% Discount)***	$6,390
BZX/BYX/EDGX/EDGA	FREE

* Fee covers both A and B feeds (over independent cross-connects) and is for connectivity only.

** U.S. Equity Select + SIP Bundle includes the following market data products: UQDF/UTDF/OMDF, CQS/CTS, Nasdaq TotalView, Nasdaq BX TotalView, Nasdaq PSX TotalView, NYSE OpenBook Ultra, NYSE ArcaBook, NYSE American OpenBook Ultra, and BBDS/TDDS.

*** OPRA + SIP Bundle includes the following market data products: OPRA, UQDF/UTDF/OMDF, and CQS/CTS.

Firms are required to pay any exchange related data fees directly to that exchange.

Unicast Access Order Entry:

Bandwidth	Fee Per Month
1Mb	$500
5Mb	$1,000
10Mb	$1,250
25Mb	$1,500
50Mb	$2,500
100Mb	$3,500

The Unicast Access Order Entry fee shall not be charged for bandwidth required to access BZX, BYX, EDGA, EDGX, BZX Options, and EDGX Options.

NASDAQ

NASDAQTrader.com

Nasdaq Global Data Products
All U.S.-based Products Price List

Pricing information on the Nasdaq Nordic and Baltic markets can be found here.
(http://nordic.nasdaqomxtrader.com/marketdata/pricinginformationwide/).

The NASDAQ Stock Market

Nasdaq TotalView

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
Nasdaq TotalView	Nasdaq, NYSE, and NYSE MKT Issues	Professional/Corporate: $76 per subscriber Non-Professional: $15 per subscriber
Managed Data Solution (Internal Use Only)	Nasdaq, NYSE, and NYSE MKT Issues	Professional/Corporate: $375 per subscriber Non-Professional: $60 per subscriber
Enhanced Display Solution	Nasdaq, NYSE, and NYSE MKT Issues	Professional/Corporate: $80 per subscriber Non-Professional: $15 per subscriber
Nasdaq Depth Non-Display (Direct Access Only)	Nasdaq, NYSE, and NYSE MKT Issues	1 to 39 subscribers = $375 per subscriber 40 to 99 subscribers = $15,000 per firm 100 to 249 subscribers = $30,000 per firm 250 subscribers or more = $75,000 per firm
Nasdaq Depth Non-Display Platform	Nasdaq, NYSE, and NYSE MKT Issues	$5,000 per Trading Platform (up to a maximum charge of $15,000)
Distributor Fees		
Nasdaq Depth Data	Nasdaq, NYSE, and NYSE MKT Issues	Internal Distribution: $1,500 per firm External Distribution: $3,750 per firm Direct Access: $3,000 per firm
FilterView/NOIView	Net order imbalance data only	Direct Access: $750 per firm
Nasdaq Managed Data Solutions License Fee (For the right to offer Managed Data Solutions to Clients)	Nasdaq, NYSE, and NYSE MKT Issues	$2,500 per Distributor

| Enhanced Display Solution | Nasdaq, NYSE, and NYSE MKT Issues | 1 to 399 subscribers = $4,000
400 to 999 subscribers = $7,500
1,000 subscribers or more = $15,000

plus applicable EDS TotalView subscriber fees |

Enterprise License Option

Nasdaq TotalView Enterprise License— Non-Professionals	Nasdaq, NYSE, and NYSE MKT Issues	$25,000 plus: $9 per non-professional subscriber $60 per professional subscriber
Nasdaq TotalView Nasdaq Depth Enterprise License— Non-Professionals	Nasdaq, NYSE, and NYSE MKT Issues	$500,000
Nasdaq TotalView Enterprise License— Professionals	Nasdaq, NYSE, and NYSE MKT Issues	$100,000 plus: $9 per non-professional subscriber $60 per professional subscriber
Nasdaq TotalView Nasdaq Depth Non-Display— Direct Access	Nasdaq, NYSE, and NYSE MKT Issues	$75,000
Nasdaq TotalView Enterprise License— Enhanced Display Solution	Nasdaq, NYSE, and NYSE MKT Issues	$33,500 plus applicable TotalView subscriber fees

TotalView-ITCH FPGA Distributor Fees

TotalView-ITCH FPGA	Internal Distributor	$25,000 per distributor
	External Distributor	$2,500 per distributor
	Internal and External Distributor	$27,500 per distributor
	Managed Data Solutions (MDS) Distributor	1 subscriber = $5,000 Additional Subscribers = $750 each

Nasdaq Basic

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
Nasdaq Basic— Per User Option	Nasdaq Issues	Professional/Corporate: $13 each Non-Professional: $0.50 each
	NYSE Issues	Professional/Corporate: $6.50 each Non-Professional: $0.25 each
	Amex Issues	Professional/Corporate: $6.50 each Non-Professional: $0.25 each
Nasdaq Basic—	Nasdaq Issues	$0.0025 each

Per Query Option	NYSE issues	$0.0015 each
	Amex Issues	$0.0015 each
Nasdaq Basic— Enterprise License	Nasdaq, NYSE and Amex Issues	$365,000 for unlimited internal Professional (display only) usage* *($2 per user fee for usage over 16,000 via a controlled display device)
Nasdaq Basic— Broker Dealer Enterprise License	Nasdaq, NYSE and Amex Issues	$100,000 per broker dealer electronic system

Distributor Fees

<u>Nasdaq Basic Internal Distributor Fee</u>	Nasdaq, NYSE and Amex Issues	$1,500 per firm
<u>Nasdaq Basic External Distributor Fee</u>	Nasdaq, NYSE and Amex Issues	$2,000 per firm

Derived License Option

Non-Professional Derived Data License	Nasdaq, NYSE and Amex Issues	$1,500 per firm

Data Consolidation Fee

Nasdaq Basic with NLS Plus	Nasdaq, NYSE and NYSE MKT Listed Issues	$350

Monthly Administrative Fees

Nasdaq Basic with NLS	Nasdaq, NYSE and NYSE MKT Listed Issues	Nasdaq: $100
Nasdaq Basic with NLS Plus	Nasdaq, NYSE and NYSE MKT Listed Issues	Nasdaq: $100 BX: $100 PSX: $100

Nasdaq Last Sale (NLS) (Non-Professional use only, see Basic rates for Professional use)

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
NLS	Nasdaq Issues	1 to 9,999 users: $0.60 each 10,000 to 49,999 users: $0.48 each 50,000 to 99,999 users: $0.36 each 100,000 user or more: $0.30 each
	NYSE and Amex Issues	1 to 9,999 users: $0.30 each 10,000 to 49,999 users: $0.24 each 50,000 to 99,999 users: $0.18 each 100,000 users or more: $0.15 each
NLS — Per Query Option	Nasdaq Issues	Up to 9,999,999: $0.0030 each 10 million to 19,999,999: $0.0024 each 20 million to 29,999,999: $0.0018

		each Over 30 million: $0.0015 each
	NYSE and Amex Issues	Up to 9,999,999: $0.0015 each 10 million to 19,999,999: $0.0012 each 20 million to 29,999,999: $0.0009 each Over 30 million: $0.000725 each
NLS — Unique Device Option	Nasdaq Issues	1 to 99,999: $0.036 each 100,000 to 999,999: $0.030 each Over 1 million: $0.024 each
	NYSE and Amex Issues	1 to 99,999: $0.018 each 100,000 to 999,999: $0.015 each Over 1 million: $0.012 each

Distributor Fees

NLS Distributor Fee	Nasdaq, NYSE and Amex Issues	$1,500 per firm
FilterView - Nasdaq Trades	Nasdaq, NYSE and Amex Issues (Nasdaq Execution System only)	$750 per firm
FilterView - TRF Trades	Nasdaq, NYSE and Amex Issues (FINRA/Nasdaq Trade Reporting Facility only)	$750 per firm

Enterprise License Option

NLS Enterprise License	Nasdaq, NYSE and Amex Issues	$41,500 per firm

NLS Plus

Entitlement Name	Security Coverage	Fees
Monthly Usage and Distributor Fees	Nasdaq, NYSE and NYSE MKT Listed Issues	Firms are liable for Nasdaq Last Sale OR Nasdaq Basic fees
Monthly Administration Fees	Nasdaq, NYSE and NYSE MKT Listed Issues	Nasdaq: $100 BX: $100 PSX: $100
Monthly Data Consolidation Fee	Nasdaq, NYSE and NYSE MKT Listed Issues	$350

Nasdaq MatchView

Entitlement Name	Security Coverage	Monthly Fee
Nasdaq MatchView	Nasdaq, NYSE and Amex Issues	$5,000 per firm for 1st server
Nasdaq MatchView Enterprise License	Nasdaq, NYSE and Amex Issues	$10,000 per firm for 2+ servers

Nasdaq Level 2

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
Nasdaq Level 2 with Nasdaq OpenView	Nasdaq Issues	Professional/Corporate: $70 per subscriber Non-Professional: $14 per subscriber
	NYSE and NYSE MKT Issues	Professional/Corporate: $6 per subscriber Non-Professional: $1 per subscriber
Enhanced Display Solution	Nasdaq Issues	Professional/Corporate: $74 per subscriber Non-Professional: $14 per subscriber
	NYSE and NYSE MKT Issues	Professional/Corporate: $6 per subscriber Non-Professional: $1 per subscriber
Nasdaq Depth Non-Display (Direct Access Only)	Nasdaq, NYSE and NYSE MKT Issues	1 to 39 subscribers = $375 per subscriber 40 to 99 subscribers = $15,000 100 to 249 subscribers = $30,000 250 subscribers or more = $75,000
Nasdaq Depth Non-Display Platform	Nasdaq, NYSE and NYSE MKT Issues	$5,000 per Trading Platform (up to a maximum charge of $15,000)
Managed Data Solution (Internal Use Only)	Nasdaq, NYSE and NYSE MKT Issues	Professional/Corporate: $375 per subscriber Non-Professional: $60 per subscriber
Depth Distributor Fees		
Nasdaq Depth Fee	Nasdaq Issues	Internal Distribution: $1,000 per firm External Distribution: $2,500 per firm Direct Access: $2,000 per firm
Nasdaq Depth Fee for OpenView	NYSE and NYSE MKT Issues	Internal Distribution: $500 per firm External Distribution: $1,250 per firm Direct Access: $1,000 per firm
Enhanced Display Solution	Nasdaq, NYSE and NYSE MKT Issues	1 to 399 Subscribers = $4,000 400 to 999 Subscribers= $7,500 1,000 or more Subscribers = $15,000 plus applicable EDS Level 2 and OpenView subscriber fees

Nasdaq BX

BX TotalView

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
BX TotalView	Nasdaq Issues NYSE and Regional Issues	Professional/Corporate: $40 per subscriber Non-Professional: $1 per subscriber
BX TotalView Non-Display	Nasdaq Issues NYSE and Regional Issues	$55 per subscriber
Managed Data Solution (Internal Use Only)	Nasdaq, NYSE and NYSE MKT Issues	Professional/Corporate: $150 per subscriber Non-Professional: $20 per subscriber
Distributor Fees		
BX TotalView	Nasdaq, NYSE and Regional Issues	Internal Distribution: $750 per firm External Distribution: $1,500 per firm Direct Access: $1,000 per firm
Managed Data Solution Administration Fee (For the right to offer Managed Data Solutions to client organizations)	Nasdaq, NYSE and NYSE MKT Issues	$1,500 per distributor
Enterprise License Option		
BX TotalView Non-Display Usage	Nasdaq, NYSE and Regional Issues	$20,000

BX Basic

Entitlement Name	Security Coverage	Monthly Fee
BX Basic	Nasdaq, NYSE and Regional Issues	Fees are currently waived

BX Last Sale

Entitlement Name	Security Coverage	Monthly Fee
BX Last Sale	Nasdaq, NYSE	Fees are currently waived

BX Monthly Administration Fee

Entitlement Name	Usage Type	Monthly Fee
BX Data Products — Monthly Administration Fee	Delayed Data Products	$50 per firm
	Real-Time Data Products	$100 per firm

Nasdaq PSX

PSX TotalView

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
PSX TotalView	Nasdaq, NYSE, NYSE Amex and NYSE Arca	Professional/Corporate: $40 per subscriber Non-Professional: $1 per subscriber
PSX TotalView Non-Display	Nasdaq, NYSE, NYSE Amex and NYSE Arca	$50 per subscriber
Managed Data Solution (Internal Use Only)	Nasdaq, NYSE and NYSE MKT Issues	Professional/Corporate: $150 per subscriber Non-Professional: $20 per subscriber
Distributor Fees		
PSX TotalView	Nasdaq, NYSE, NYSE Amex and NYSE Arca	Internal Distribution: $500 per firm External Distribution: $1,250 per firm Direct Access: $1,000 per firm
Managed Data Solution Administration Fee (For the right to offer Managed Data Solutions to client organizations)	Nasdaq, NYSE and NYSE MKT Issues	$1,500 per Distributor
Enterprise License Option		
PSX TotalView Non-Display Usage	Nasdaq, NYSE, NYSE Amex and NYSE Arca	$17,000

PSX Basic

Entitlement Name	Security Coverage	Monthly Fee

PSX Basic   Nasdaq, NYSE   Fees are currently waived
                               and Regional Issues

PSX Last Sale

Entitlement Name	Security Coverage	Monthly Fee
PSX Last Sale	Nasdaq, NYSE and Regional Issues	Fees are currently waived

PSX Monthly Administration Fee

Entitlement Name	Usage Type	Monthly Fee
PSX Data Products — Monthly Administration Fee	Delayed Data Products	$50 per firm
	Real-Time Data Products	$100 per firm

Nasdaq Web-Based Reports

Nasdaq Data-On-Demand Service

Entitlement Name	Security Coverage	Annual Fee
Nasdaq Data-On-Demand Distributor Fee	Nasdaq, NYSE, NYSE American OTCBB and Non-OTC Issues	Contact your Nasdaq representative for pricing
	Download Tier	**Monthly Fee**
Monthly Gigabyte (GB) Download Fees	1 to 300 GB	Included in annual distributor fee
	301 GB or more	$5/per GB

Nasdaq Market Replay

Entitlement Name	Security Coverage	Monthly Fee
Usage Fees		
Nasdaq Market Replay — Subscriber Fees	Nasdaq, NYSE and Amex Issues	Professional/Corporate: $50 per user Non-Professional: $20 per user
Distributor Fees		
Nasdaq Market Replay — Distributor Fee	Nasdaq, NYSE and Amex Issues	Professional Internal Distribution: $1,000 per

firm
External Distribution: $5,000 per firm
<u>Non-Professional</u>
$5,000 per firm

<u>Enterprise License Option</u>

Nasdaq Market Replay — Enterprise License	Nasdaq, NYSE and Amex Issues	$25,000 per month

Nasdaq Daily List and Nasdaq Fundamental Data

Entitlement Name	Monthly Fee
Nasdaq Daily List and/or Fundamental Data <u>Distributor Fee</u>	$1,750 per organization

Nasdaq Historical TotalView-ITCH<u>*</u>

Entitlement Name	Usage Tier	Monthly Fee
Nasdaq Historical TotalView-ITCH <u>Distributor Fee</u>	1 to 500 subscribers	$1,250
	501 to 999 subscribers	$1,500
	1,000 to 4,999 subscribers	$2,500
	5,000 to 9,999 subscribers	$3,500
	10,000 or more subscribers	$5,000

BX Historical TotalView-ITCH<u>*</u>

Entitlement Name	Monthly Fee
BX Historical TotalView-ITCH <u>Distributor Fee</u>	$500

PSX Historical TotalView-ITCH<u>*</u>

Entitlement Name	Monthly Fee
PSX Historical TotalView-ITCH <u>Distributor Fee</u>	$500

Nasdaq Daily Share Volume

Entitlement Name	Monthly Fee
Nasdaq Daily Share Volume Distributor Fee	$2,500

Nasdaq Short Interest

Entitlement Name	Distributor Type	Subscribers (Non-Data Feed Recipients)	Monthly Fee
Nasdaq Short Interest Distributor Fee	Nasdaq Short Interest - Direct Access	N/A	$500
	Nasdaq Short Interest - Internal Distribution	Unlimited Internal Use	$1,000
	Nasdaq Short Interest - External Distribution	1-499 500-9,999 10,000+	$2,500 $5,000 $7,500
	Nasdaq Short Interest External Distribution to external Controlled Products with $5,000 or more spend on Nasdaq Last Sale (NLS) or NLS Plus in monthly usage fees or Distributors on the 100K or 500K Enterprise License for Nasdaq Basic or Nasdaq Depth (respectively) (Direct Access fees still apply)	N/A	$1,500

Nasdaq Short Sale Volume Reports

Entitlement Name	Usage Tier	Monthly Fee
Nasdaq Short Sale Volume Reports Distributor Fee	Internal Distributor	$750 per firm
	External Distributor	$1,250 per firm

The BX and PSX short sale files are available for free download.

Nasdaq PHLX Options Trade Outline (PHOTO)

Entitlement Name	Market Coverage	Monthly Fee

Distributor Fees

Nasdaq PHLX Options Trade Outline (PHOTO)	PHLX	Internal Distribution: End-of-Day Subscription: $500 Intra-Day Subscription: $1,500 Historical End-of-Day: $400 Historical Intra-Day: $750

Historical ITTO*

Entitlement Name	Market Coverage	Monthly Fee
Distributor Fees		
Historical ITTO	NOM	Fees are currently waived

Nasdaq Options Trade Outline (NOTO)

Entitlement Name	Market Coverage	Monthly Fee
Distributor Fees		
Nasdaq Options Trade Outline (NOTO)	NOM	Internal Distribution: End-of-Day Subscription: $500 Intra-Day Subscription: $750 Historical End-of-Day: $250 Historical Intra-Day: $500

NASDAQ Options Market

Nasdaq ITCH-to-Trade Options (ITTO)

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
ITTO - Internal	Nasdaq Options	$1,500 per firm
ITTO - External	Nasdaq Options	$2,000 per firm
Non-Display Enterprise License (Internal Distribution Only)	Nasdaq Options	$10,000 per firm
Managed Data Solution Administration Fee*		$500 per Distributor
NOM Managed Data Solution Subscriber Fee		$125 per Subscriber

FPGA ITTO Distributor Fees

FPGA ITTO	Internal Distributor	$10,000 per distributor
	External Distributor	$1,000 per distributor
	Internal and External Distributor	$11,000 per distributor
	Managed Data Solutions (MDS) Distributor	1 subscriber = $1,000
		Additional Subscribers = $250 each

*For the right to offer Managed Data Solutions to client organizations

Best of Nasdaq Options (BONO)

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
BONO - Internal	Nasdaq Options	$1,500 per firm
BONO - External	Nasdaq Options	$2,000 per firm
Non-Display Enterprise License *(Internal Distribution Only)*	Nasdaq Options	$10,000 per firm
Managed Data Solution Administration Fee*		$500 per Distributor
NOM Managed Data Solution Subscriber Fee		$125 per Subscriber

*For the right to offer Managed Data Solutions to client organizations

Nasdaq PHLX

PHLX Depth of Market

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
PHLX Depth of Market	NASDAQ OMX PHLX Issues	Internal: $4,000 External: $4,500

PHLX Orders

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
PHLX Orders	NASDAQ OMX PHLX Issues	Internal: $3,000 External: $3,500

Top of PHLX Options (TOPO)

Entitlement Name	Security Coverage	Monthly Fee
__Distributor Fees__		
Top of PHLX Options (TOPO)	NASDAQ OMX PHLX Issues	Internal: $2,000 External: $2,500
Managed Data Solution Administration Fee*		$1,500 per Distributor
PHLX Managed Data Solution Subscriber Fee		$250 per subscriber

*For the right to offer Managed Data Solutions to client organizations

TOPO Plus PHLX Orders

Entitlement Name	Security Coverage	Monthly Fee
__Distributor Fees__		
TOPO Plus PHLX Orders	NASDAQ OMX PHLX Issues	Internal: $4,000 External: $5,000 user fees - $20 pro, $1 non-pro

PHLX Depth of Market

Entitlement Name	Security Coverage	Monthly Fee
__Distributor Fees__		
PHLX Depth of Market	NASDAQ OMX PHLX Issues	Internal: $4,000 External: $4,500

Nasdaq BX Options

BX Options Depth of Market (BX Depth)

Entitlement Name	Security Coverage	Monthly Fee
*__Distributor Fees__**		
BX Depth - Internal	BX Options	$1500 per firm
BX Depth - External	BX Options	$2000 per firm
Non-Display Enterprise License *(Internal Distribution Only)*	BX Options	$2,500 per firm
__Subscriber Fees__		
BX Depth	BX Options	Internal: Professional - $10/subscriber

External:
Professional - $10/subscriber
Non-Professional - $1/subscriber

*One distributor fee will allow a subscriber access to both BX Depth and BX Top

BX Options Top of Market (BX Top)

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
BX Top - Internal	BX Options	$1500 per firm
BX Top - External	BX Options	$2000 per firm
Non-Display Enterprise License *(Internal Distribution Only)*	BX Options	$2,500 per firm
Usage Fees		
BX Top	BX Options	Internal: Professional - $5/subscriber External: Professional - $5/subscriber Non-Professional - $1/subscriber

*One distributor fee will allow a subscriber access to both BX Top and BX Depth

NASDAQ Futures (NQF)

Entitlement Name	Security Coverage	Monthly Fee
NFX Futures	Nasdaq Futures Exchange Issues	Fees are currently waived.

Global Data

All fees are monthly unless noted. All fees are subject to change at the discretion of Nasdaq. Please note that these prices do not include distributor/vendor access charges or telecommunications charges.

Nasdaq Global Index Data Service (GIDS)

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
GIDS Distributor Fee - Internal	Nasdaq Indexes	1 to 100 subscribers: $850 101+ subscribers: $2,500
GIDS Distributor Fee - External	Nasdaq Indexes	1 to 499 subscribers: $3,500 500 to 9,999 subscribers: $8,500

		10,000 to 29,999 subscribers: $12,500 30,000+ subscribers: Contact Nasdaq for details
GIDS Direct Access	Nasdaq Indexes	$2,000 per firm
GIDS Derived	Nasdaq Indexes	$1,000 per firm
GIDS Delayed Distributor Fee – *Delayed 15 Minutes Internal	Nasdaq Indexes	1 to 99 subscribers: $500 per firm 100+ subscribers: $850 per firm
GIDS Delayed Distributor Fee – *Delayed 15 Minutes External	Nasdaq Indexes	1 to 999 subscribers: $1,000 per firm 1000+ subscribers: $1,500 per firm

Hosted Solution

Per Delayed Hosted Firm	Nasdaq Indexes	$250
Per Real-Time Hosted Firm	Nasdaq Indexes	$750
Enterprise License	Nasdaq Indexes	$20,000

NASDAQ OMX Global Index Watch (GIW)

Entitlement Name	Security Coverage	Monthly Fee
Distributor Fees		
GIW US Family (including PHLX) - Internal Use Only	NASDAQ OMX Indexes U.S. and Global	$3,000 per firm
GIW Green Economy Family - Internal	NASDAQ OMX Green Economy	$300 per firm
GIW NASDAQ Axioma Equity-Commodities - Internal	NASDAQ Axioma Equity-Commodities	$1,000 per firm Fee Hoilday till October 2012
GIW NASDAQ U.S. All Market Family - Internal	NASDAQ U.S. All Indexes	$2,000 per firm
GIW U.S. Treasury Fixed Income - Internal Use Only	U.S. Treasury Fixed Income	First site location: $2,500 Each additional site location: $1,250 Enterprise cap per firm: $5,000
GIW Sharia Family - Internal	NASDAQ OMX Sharia	$1,000 per firm
GIW Nordic & Baltic Family (bundled) - Internal	NASDAQ OMX Indexes Nordic & Baltic (bundled)	€ 835 per firm
GIW Nordic Family - Internal	NASDAQ OMX Indexes Nordic only	€ 585 per firm
GIW Baltic Family - Internal	NASDAQ OMX Indexes Baltic only	€ 250 per firm

Nasdaq Fund Network Data Service

Nasdaq Fund Network Data Products

Entitlement Name	Description	Monthly Rate
Nasdaq Fund Network Data Service - Direct Access	Monthly fee to receive NFN daily valuation data directly from Nasdaq	$750
Nasdaq Fund Network Data Service - External Distribution	Monthly fee to redistribute **real-time** MFQS daily valuation data to third party users	1 to 499 subscribers: $1,500 500 to 4,999 subscribers: $3,000 5000+ subscribers: Contact Nasdaq for details
	Monthly fee to redistribute **delayed** NFN daily valuation data to third party users	$500 per firm
Nasdaq Fund Network Data Service - Internal Distribution	**Real-time** Distributor Fee	$750 per firm
	Delayed Distributor Fee	$250 per firm
Nasdaq Fund Network Data Service - Hosted Solution	Monthly fee to display NFN daily valuation data via a hosted solution product	Per Delayed Hosted Firm: $50 Per Real-Time Hosted Firm: $100 Enterprise License: Contact Nasdaq for details
NFN Daily List / NFN Registration Service	Monthly fee to access the NFN Daily List and other reports via secured NFN website or web service	$500

Nasdaq Annual Administration Fee

Nasdaq Administration Fees

Entitlement Name	Usage Type	Fee
Nasdaq Global Data Products — Monthly Administration Fee	Delayed Data Products	$50 per month
	Web-Based Products	$100 per month
	Real-Time Data Products	$100 per month

Nasdaq Monthly License Fee

Entitlement Name	Usage Type	Fee
Nasdaq Managed Data Solutions License Fee (For the right to offer Managed Data Solutions to Clients)	Nasdaq Depth Products*	$2,500 per month

*Includes Level 2, OpenView and TotalView

Nasdaq Fund Network (NFN)

Nasdaq Fund Network (NFN)

Fee Type	Description	Rate
NFN Instrument Registration Fees		
NFN Annual Fee for Issuers / Fund Families	Annual instrument listing fee invoiced by Nasdaq	$700 per NFN instrument
NFN Valuation Service Fees		
NFN Valuation Service - Data Entry / Access Fee	Monthly access fee for NFN issuers and NFN pricing agents to enter Valuation and corporate action data via secured NFN website or secured NFN FTP server	$100 per User ID
Computer-to-Computer Interface (CTCI)	Monthly fees associated with CTCI connectivity	Refer to Nasdaq Transaction Services (NTS) price list

Details:

The usage fees are assessed based on the number and type of subscribers that access Nasdaq market data. See the Nasdaq Data Policies for additional information. Please consult with your Nasdaq Global Information Services Account Manager to determine which fee option is best suited to your company's needs.

For Nasdaq real-time data feed products, the distributor fees are assessed on subscribers that receive Nasdaq information in a data feed format. This product is also covered by Nasdaq monthly administration fee(s). Refer to Nasdaq Data Policies for details.

For select Nasdaq web-based reports, the distributor fees are assessed based on the number of Subscribers, while other web-based reports have monthly fees assessed on the distribution of the data. Internal Distributor is defined as a firm that distributes market data internally (i.e. to employees or authorized agents of the organization and/or within the premises of the Distributor. External Distributor is defined as a firm that distributes the data externally to third-party recipients. The External Distributor fee includes internal usage of the data. Web-based products are also covered by the Nasdaq monthly administration fee. Refer to Nasdaq Data Policies for details.

Nasdaq Basic only:

The Derived Data License covers non-professional subscriber fees only; firms must still pay applicable distributor fees and professional subscriber fees. See the Nasdaq Data Policies for additional information on the Non-Professional Derived Data License. Please contact Nasdaq Global Information Services at +1 301 978 5307 (Option #1) for details.

Nasdaq GLIMPSE retransmission facility is available only to Nasdaq TotalView ITCH and/or Nasdaq Options Depth Data Feed Recipients also paying for Direct Access and Distributor Fees.

The enterprise license option is available to all firms. For some products, there may be a minimum subscription length. Please contact your Nasdaq Global Information Services Account Manager to discuss this pricing option.

The FilterView distributor fee is assessed only on firms that access a filtered data feed product offered directly by Nasdaq.

All distributors of Nasdaq proprietary data are subject to the Nasdaq monthly Administration Fee. The fee is assessed upon a firm based on its highest level of service. See the Nasdaq Data Policies for additional information.

For GIDS/GIW:

For opportunities to distribute index data, please contact your Nasdaq Global Information Services Account Manager.