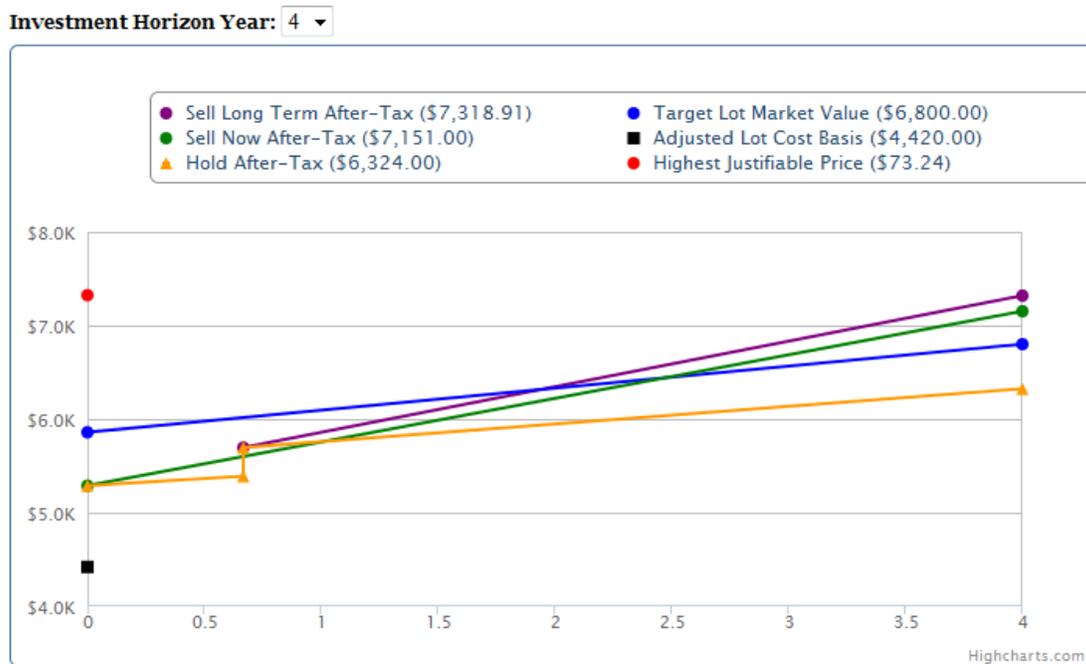# Analysis Results
Explained

In this briefing paper we will explain and describe all the different output results from an **Efficient Tax Portfolio Optimizer Analysis** submission. Starting with the graphical depiction of an **Efficient Tax** fundamental analysis, available when a User clicks the "View Graph" link all the way on the left of a Results Set. As pictured below:

In the pictorial above, the top half or graphical portion of a Graph Results Set generated for each tax-lot evaluated in an **Efficient Tax Portfolio Optimizer Analysis** submission, we have a number of important output elements. Once a User knows how to read and interpret the various output scenarios depicted in graphical form, at the tax-lot level, the after-tax economics of a tax-lot, can be viewed with complete clarity. We urge you to review the detailed descriptions on each of the scenarios possible, for example, tax-lots with gains, those with losses, those held less than one year, and those held longer, with varying degrees of future performance prospects, available in both written and video form, available in our Education Library.

We won't use this space to duplicate those descriptions, but will rather explain each of the data elements within the Results Set.

At the top left of the chart, you will notice a toggle for Investment Horizon Year, set at 4, in this example. An **Efficient Tax Portfolio Optimizer Analysis** Submission, requires the User to select a time horizon. A Results Set Ranking will only be generated for the chosen time horizon. However once an analysis is completed, each tax-lot's break-even economics after-tax chart can be viewed by toggling the Investment Horizon Year. The User may toggle back and forth between each horizon year if they wish to.

Below the Investment Horizon Year toggle, we rank from greatest to least, in End-of-Horizon After-Tax dollars, the forecasted results of the different choices an investor has in terms of deciding what to do with an existing tax-lot, based upon its current price, prospects, cost basis and so forth. And we identify the End-of-Horizon After-Tax values associated with each choice. Those choices are either to Hold an invested tax-lot out to the end of a chosen investment horizon and then sell, Sell Now, or wait and Sell Long-Term. The different choices are color coded, and match the graph results depicted below. If a tax-lot is held less than a year, there will be three choices presented and ranked. Since waiting until the long-term window is one of the options. That option evaporates once a tax-lot is held more than one year, and therefore only two comparative results will be ranked.

To the right of the strategy path rankings, we supply three additional pieces of data. At the top we identify the total expected Market Value of a tax-lot at the end of a chosen time horizon. Based upon the Expectations inputted in the Input Page.

Next we show the Adjusted Lot Cost Basis. If the referenced tax-lot has a profit, but there is no Tax-Loss Harvesting taking place, whereby losses are being utilized to offset gains, then the Adjusted Cost Basis will be the Original or Residual Cost Basis of a Tax-lot. (An Original Cost Basis may be reduced, along with the number of shares remaining in a tax-lot, as a result of a previous Shares to Sell Designation, or the prior Tax-Loss Harvesting of a number of shares within an original tax-lot. Therefore a tax-lot will have Residual shares and cost basis evaluated and depicted in the graph output display). If a tax-lot is the subject of some Tax-Loss Harvesting, then for the number of shares that losses are able to eliminate a taxable gain, the cost basis is raised to the current market value of the tax-lot, resulting in no tax liability currently being due do to the harvesting process. If the Adjusted Lot Cost Basis has been raised to the current market level, the graph and output results detailed below will just apply to the number of shares recommended to be sold as a result of a Tax-Loss Harvesting loss allocation. Because their after-no-tax proceeds can be

reinvested at a better, perhaps risk premium adjusted, return, than with a Hold. In this example, the number of shares in which the Tax-Loss Harvesting applies, will be noted below the graph on the right.
Below the Adjusted Lot Cost Basis, is the Highest Justifiable Price of the stock. Graphically depicted on the left hand side of the graph.

Again, for a complete description of the interpretation of the graphs, please read or view our technical descriptions available in our Education Library. The chart displayed below, is the companion output data set accompanying the graph above.

Company Name:	Walgreen Co.	Max Strategy:	SELL WHEN LONG-TERM
Ticker:	WAG	Sell Now Total Tax-Lot Tax Liability:	$569.84
Purchase Date:	7/1/2013	After-Tax Annual Return on Taxes:	36.30%
Original or Residual Shares:	100	After-Tax Annual Avg. Rec. Advantage:	3.90%
Original or Residual Cost Basis:	$4,420.00	Hold Unrealized Gain:	$1,439.00
Cost/Share:	$44.20	Realized S.T. Gains/Losses:	$0.00
Price Assumption:	$58.59	Realized L.T. Gains/Losses:	$7,546.00
Current Lot Market Value:	$5,859.00	Adjusted Lot Cost Basis:	$4,420.00
Current Lot Gross After-Tax Value:	$5,289.16	Tax Loss Harvesting Matching Shares:	0
Simple Return:	32.60%	Tax Loss Harvesting Alternate Shares:	0
New Purchase After-Tax IRR:	3.10%	Months Until Long Term:	8
Existing Tax-Lot After-Tax IRR:	4.60%		

INPUTS

Filing State:	AK	Current Market Price Per Share:	$58.59
Fed. Marginal Short-Term Tax Rate:	39.60%	Annual Dividend Assumption:	$0.00
Fed. Marginal Long-Term Tax Rate:	20.00%	Dividend Growth Rate:	0.00%
Other Income Offset:	$3,000.00	Before-tax Reinvestment Return Rate:	10.00%
Brokerage Cents per Share:	$0.00	Highest Justifiable Price:	$73.24
Brokerage Annual Wrap Fee:	0.00%	Stock Risk Premium Adjustment:	0.00%
Annual Advisor Fee:	0.00%	Minimum Compound Selling Advantage	0.00%
Portfolio Turnover:	50.00%	Price Targeting Option:	Price
		Price Target:	$68.00

The outputs of an **Efficient Tax** tax-lot analysis are displayed in the top portion of the Results Set above. Starting in the upper left hand corner, of course *Company Name, Ticker*, and *Purchase Date* are all self-explanatory.

Then we have;

Original or Residual Shares; Again, an original number of shares of a tax-lot purchased of 100, would only have 78 shares shown here if previously 22 shares had been recommended *to* be sold in a **Efficient Tax Portfolio Optimizer Analysis** Results Ranking, or had been Designated to be sold.

Original or Residual Cost Basis: If, as in the example described above, 22 shares of an original tax-lot had already been ranked to be sold, or rather 22% of the original tax-lot, then an Original Cost Basis will be also reduced by 22%, and be shown here as a Residual Cost Basis.

Cost/Share; This the price per share paid on the original investment, and is not affected by previous actions.

Current Lot Market Value; This would be the Original or Residual number of shares remaining in a tax-lot, time the current Delayed Market Price, or price inputted at the time of an **Efficient Tax Portfolio Optimizer Analysis** Submission.

Current Lot Gross After-Tax Value; This is the Market Value of a tax-lot, less any taxes that would be due should the tax-lot be sold today. Without the benefit of any Tax-Loss Harvesting loss allocations.

Simple Return; This is the positive or negative profit percentage comparing the current market priced with the Cost/Share. With the formula being (Market Price/Cost Basis)-1.

New Purchase After-Tax IRR; This IRR value is the result of comparing what an investor would be forecasted to return on an annual after-tax compound basis if a stock were purchased today, at its current market price, held out to the end of the chosen investment horizon, and price target, with all its benefits and costs accounted for such as dividends, taxes, and fees.

Existing Tax-Lot After-Tax IRR; Here at **Efficient Tax LLC** we believe the correct method of assessing after-tax wealth accumulation is by comparing a tax-lot's after-tax value at one point in time, with that at a time later. Consistent with that, and as the best measure of an individual tax-lot's future after-tax performance prospects, this value compares the current after-tax value of a tax-lot, assuming any imbedded and deferred tax liability were to be paid, with its value, on an after-tax value, at the end of a chosen investment horizon. One will notice that in the case of a profitable tax-lot held less than one year, that this value will be significantly higher before a tax-lot achieves the long-term status, than afterwards, because the after-tax value is less, prior to an investment achieving the long-term tax status, than afterwards. Therefore the slope, and relative difference in after-tax value is less for tax-lots held less than twelve months.

Max Strategy; This output identifies which decision choice, given assumptions, would yield the greatest after-tax value at the end of the chosen investment horizon under analysis. The Max Strategy "Hold" would indicate holding the tax-lot, at its current price, relative to its price target, would be the highest after-tax strategy value. "Hold When Long-Term" would indicate that at current a stock's current price, selling in the Short-Term window is not justified, but if the price and price targets remain the same when the Long-Term status is achieved, then selling, and paying a lesser amount of tax, and reinvesting more opportunistically, is justified.

Otherwise, if a stock price is high enough to justify selling once a tax-lot is held more than a year, then the Max Strategy would be "Sell Now". As it will also be should the price be high enough in the Short-Term window to sell, considerate of a reasonable Highest Justifiable Price input.

Sell Now Total Tax-Lot Tax Liability; For either the Original number of shares in a tax-lot, or the Residual number of shares remaining in a tax-lot due to prior partial sales outright, or those resulting from any previous Tax Loss Harvesting taking place, or Shares to Sell Designations, this amount is the accrued and deferred tax liability associated with the subject tax-lot. Which would be due as a result of selling all the shares remaining in a tax-lot.

After-Tax Annual Return on Taxes; If the selling of a tax-lot and the realization of a gain, would, for example, require a tax-payer to pay an imbedded $1 tax sooner rather than later, and the resulting "Sell Now" decision would yield a $1 extra value in after-tax wealth by doing so in three years, then the After-Tax Annual Return on Taxes would equal 33.3%. A 100% profit over 3 years, divided by 3. This is a very valuable metric that may only be calculated, using a computer, by utilizing **Efficient Tax's** patented approach that compares the prospective after-tax values of selling now versus holding a position. Comparing the difference between those two after-tax End-of-Horizon strategy values, positive or negative, with the Sell Now Total Tax-Lot Tax Liability. Any number above 10%, starts to become meaningful. Selling Coca-Cola because it is over-valued, and reinvesting the after-tax proceeds in Pepsi, if it is under-valued at the time, might garner for the investor, at times, as in our example, a 33.3% after-tax annual return on an investment on an early payment of taxes, without taking any more risk, in terms of forecasting price targets for each issue. Not bad in a 4% Municipal Bond Market world.

After-Tax Annual Average Recommendation Advantage; We use this label for some complicated reasons. In simple terms, it is our measure of Alpha. (Even a 1% annual after-tax Alpha is significant in terms of after-tax wealth generation. A 7% gross investment return, reduced 2% by taxes, and 2% by inflation per year, resulting in an after inflation and tax return of 3%, when improved by only a 1% per year in after-tax return, would increase an investor's spendable purchasing power by 33% per year.) We use this term because the value identified, is only forecasted to be achieved if the Max Strategy is followed. This value can only be zero or positive, and only is positive if there is a choice that could be made, to either "Sell Now", or "Sell When Long-Term", given current prices and assumptions, that is forecasted to generate more after-tax wealth than holding a position out to the end of a chosen time horizon, and then selling and paying any tax liability. The introduction of the "Sell When Long-Term" option complicates an IRR calculation, so in order to avoid that problem, we simply take the extra after-

tax value of the Max Strategy, when compared with the Hold option, and divide that value by the number of years in an investment horizon. For example, if a Hold decision is expected to achieve a $100 value at the end of 4 years, but either a "Sell Now", or a "Sell When Long-Term" choice would yield a $110 after-tax value over the same time period, then the 10% After-Tax Recommendation Advantage would equal 2.5% on an Annual Average basis, by dividing the 10% by 4. Ergo, the After-Tax Annual Average Recommendation Advantage.

Hold Unrealized Gain; This is the difference between the cost-basis, or total amount paid for a tax-lot, and its current market value, for either the Original number of shares in a tax-lot, or the Residual number of shares remaining as a result of a prior partial sale. This value will be positive in the case of a profitable tax-lot, and negative in the case of a reduction in price since a purchase was made.

Realized S.T. Gains/Losses; This is the value for Short-Term Realized Gains/Losses inputed for this individual tax-lot's analysis. The Realized gain and Loss values inputted on the Input Page, are updated by the impacts on Realized Gains/Losses values from Shares to Sell in the Results Ranking process. The resulting realized gain and loss values resulting from the sale of a previously ranked tax-lot, is used as the input on the next tax-lot in sequence.

Realized L.T. Gains/Losses; This is the value for Long-Term Realized Gains/Losses inputed for this individual tax-lot's analysis. The Realized gain and Loss values inputted on the Input Page, are updated by the impacts on Realized Gains/Losses values from Shares to Sell in the Results Ranking process. The realized gain and loss values resulting from the sale of a previously ranked tax-lot, is used as the input on the next tax-lot in sequence.

Adjusted Lot Cost Basis; If a profitable tax-lot is only appropriate to sell by the tax eliminating impacts of realized losses in a Tax Loss Harvesting process, the cost basis will be raised to the current market value, resulting in no tax being due, for as many shares as there are losses available for offsetting purposes. Therefore the graph will show a cost basis as the current market value.

Tax Loss Harvesting Matching Shares; This represents the number of shares of a profitable tax-lot, that are recommended to be sold, because by doing so, when included in a Tax Loss Harvesting process, would generate after-tax proceeds that could be more opportunistically invested in an alternative investment than by holding, and that is accomplished either by offsetting

short-term losses against short-term gains, or long-term losses against long-term gains.

Tax Loss Harvesting Alternate Shares; At the end of a tax year, if an investor has more long-term realized losses, including loss carry-forwards, than they have realized long-term gains, they may be offset and eliminate taxes against any residual realized short-term gains that are in excess of any realized short-term losses. A higher valued after-tax proposition and use of long-term losses than being used to offset lower tax rated long-term gains. Likewise, if an investor has more realized short-term losses, including loss carry-forwards, than they have realized short-term gains, they may be offset and eliminate taxes against any residual realized long-term gains that are in excess of any realized long-term gains. A lower value proposition and use of short-term losses than being used to offset higher tax rated short-term gains. And should only be done when lowering a current year's tax rate is more important than longer-term after-tax wealth accumulation. **Efficient Tax** will only show a value, and adjust a cost basis for a tax-lot for Tax Loss Harvesting purposes, if a User deliberately, after a normal Job Submission Results Set is displayed, clicks the "Re-run Job Using Alternate Shares" button. This feature should only be used, and with caution, at the very end of an investor's year-end selling decisions. And only the Shares to Sell in a Results ranking sequence, resulting from a User clicking the "Re-run Job Using Alternate Shares" that are first identified as Alternate Shares to Sell, should be considered to be sold, up to and only including the same Alternate use of losses, are exhausted. Ignoring the impacts of the ranking below that level, as a long-term loss used to offset a short-term gain, may be nullified if further down the ranking, a long-term gain is sold, utilizing the previously used long-term loss. This output is the number of shares from either the Original or Residual shares, that may be sold, under the circumstances just described, as part of an Alternate Share Tax Loss Harvesting process.

Months Until Long-Term; This is the number of months, rounded up, until a tax-lot will be held more than a year, and will have achieved the lower tax-rated long-term tax status. Our price targeting module identifies prices targets in increments of months, not days. So we always round up in months in order to be conservative. It doesn't change the decision matrix or results on any particular day, in terms of an investor's choices.

The remainder of the graph down below, identifies the inputs that were resident for the analysis of the tax-lot. Those definitions may be found in the document **ETPO Analysis Inputs Explained**, or in the Tool-tips found imbedded within the Input Page. Please refer to those Education Elements for a definition of the inputs displayed on the Results Graph.

The remainder of the definitions refer to the columns of results residing in the Results Page, going from left to right. Starting just to the right of the View Graph link.

Ticker; The typically 3-5 alpha-character that a company is identified by on a publically traded exchange.

Name; Name is the name of the company that had been purchased, and is being reviewed as a sale candidate.

Original or Residual Shares; Either the number of shares that were purchased on the original purchase date, or the number of remaining shares owned from that total number, reduced by either a previous sale, or a partial sale higher up in a tax-lot's **Efficient Tax Portfolio Optimizer Analysis** ranking due to a Tax Loss Harvesting process, or a Shares to Sell Designation.

Purchase Date; The purchase date of the selected tax-lot, whereby the tax-lot will eclipse the Short-Term tax window and achieve the Long-Term status on the 366th day of ownership.

Original or Residual Cost Basis; The Original cost basis of a number of shares purchased on a particular day at a particular price, reduced by reduced by either a previous sale, or a partial sale higher up in a tax-lot's **Efficient Tax Portfolio Optimizer Analysis** ranking due to a Tax Loss Harvesting process, or a Shares to Sell Designation.

Cost Per Share; The price per share an investor paid for a particular tax-lot, including commissions. The total cost of a tax-lot divided by the number of shares purchased. This number won't change due to previous actions.

Price Assumption; The price inputted for a stock in the Input Page, prior to a Job Submission. **Efficient Tax** populates the Input Page with Current Delayed Pricing from BarCharts, as part of a Job Creation process. A User may modify that number should they have more up-to-date pricing, such as real-time, that they would prefer to use, or they wish to simulate the impacts of different prices.

Market Value; The market value of the subject tax-lot. The Original or Residual Shares multiplied by the market price inputted.

Total After-Tax Value; The total market value of the Original or Residual shares, less any deferred tax liability, or plus the tax-savings value of its unrealized loss.

Simple Return; The market price of a stock, divided by its Cost Per Share, minus 1.

Max Strategy; This identifies, which of the three strategy path choices an investor may decide to make, which, based upon forecasts, would yield to the investor, the greatest after-tax wealth over a chosen investment horizon. The three choices are Hold, Sell Now, or Sell When Long-Term.

After-Tax Annual Average Recommendation Advantage, Existing Lot After-Tax IRR, After-Tax Annual Return on Taxes; Please refer to the definitions above under the Graph Outputs definitions.

Shares To Sell; "Shares To Sell" has multiple meanings, and can mean any one of the following:(1)The number of shares Designated by a User within either the Portfolio, Input or Results pages, to be sold out of a particular tax-lot, and therefore included at the top of a Results Set optimization ranking, (2)The number of shares Designated by a User within the Input page, to be sold among one or more tax-lots included in a multi tax-lot stock position, (3) The number of shares to be sold out of each individual tax-lot, within the Results Set portfolio optimization sell candidate ranking, and included in all the related Efficient Tax Portfolio Optimizer tax-lot calculations.(Which may also be converted to an individual Shares To Sell Tax-Lot Sell Designation within the Results page, Re-Processing a Job directly from the Results page.)

Action Pending Notification; An **Efficient Tax Portfolio Optimizer Analysis** will notify the User if a tax-lot with a loss is included in a Results Ranking, and where a previous purchase of the same company had been made, in the same portfolio, within the last 30 days. Subjecting the investor to a potential Wash-Sale Rule implication. **Efficient Tax Portfolio Optimizer** does not calculate the tax impacts regarding any Wash-Sale Rule exposure.   Is not able to identify Wash-Sale instances from purchases after a sale with a loss has been done, another Wash-Sale trigger. And cannot identify Wash-Sale candidates from outside of the portfolio under consideration.

New Purchase After-Tax IRR; This number is to assist the User in knowing the after-tax return potential of any particular stock by comparing its future after-tax value with its current market value, given its stock price forecast. It is a good indication, separate from a tax liability associated with a currently held position, of the relative attractiveness of one stock versus another.

Realized Short-Term Gain/Loss, Realized Long-Term Gain/Loss. Please see the definition above under the Graph Outputs definitions.

Unrealized Short-Term Gain/Loss; In the case of a tax-lot held less than a year, the difference between the current market value of a tax-lot's Original or Residual shares, and its cost basis, either at a profit or a loss.

Unrealized Long-Term Gain/Loss; In the case of a tax-lot held more than a year, the difference between the current market value of a tax-lot's Original or Residual shares, and its cost basis, either at a profit or a loss.

Shares to be Sold Gross Proceeds; The Shares to Sell value, times the Current Market Price.

Sell Now Total Tax-Lot Tax Liability; The deferred and imbedded tax liability, positive or negative, due to a loss, of all of the Original or Residual shares remaining in a tax-lot.

Recommended Shares To Be Sold Tax Liability; The deferred and imbedded tax liability, positive or negative, of the number of shares of a tax-lot, displayed in the Shares to Sell output field.

Accumulated Realized Short-Term Gains; This value represents the value for Realized Short-Term Gains/Losses inputted on the Input Page, updated with the aggregate impacts of any short-term tax-lots included within an individual's results row, and any of those above it. This value then becomes the input value for Short-Term Gains/Losses for the next iteration of an **Efficient Tax Portfolio Optimizer Analysis** ranking process.

Accumulated Realized Long-Term Gains; This value represents the value for Realized Long-Term Gains/Losses inputted on the Input Page, updated with the aggregate impacts of any long-term tax-lots included within an individual's results row, and any of those above it. This value then becomes the input value for Long-Term Gains/Losses for the next iteration of an **Efficient Tax Portfolio Optimizer Analysis** ranking process.

Accumulated Gross Proceeds; The aggregate amount of before-tax sale proceeds of the individual tax-lot under consideration, resulting from the sale of the number of shares displayed in the Shares to Sell field, plus all those included for sale above it in the ranking process.

Accumulated Gross Tax Liability; The aggregate amount of-tax liability, positive or negative, resulting from potential sale of the number of shares displayed in the Shares to Sell field for the individual tax-lot under consideration, plus all those included for sale above it in the ranking process

Accumulated Net After-Tax Proceeds; The aggregate amount of after-tax sale proceeds of the individual tax-lot under consideration, resulting from the sale of the number of shares displayed in the Shares to Sell field, plus all those included for sale above it in the ranking process. A User wishing to raise a minimum amount of after-tax proceeds, should consider looking at this field for the closest number that reaches their target, and by selling that tax-lot, in addition to all of those ranked above it, in order to minimize taxes, but not at the expense of long-term after-tax wealth accumulation.

Absolute $ Sell Now Versus Hold After-Tax Alpha; For the number of Shares to Sell displayed in the Shares to Sell field, at the tax-lot level, the amount of extra after-tax value that is forecasted to be achieved, positive or negative, by comparing the after-tax value of holding a position out to the end of a chosen investment horizon, versus selling now and reinvesting. It doesn't include a calculation against a Sell When Long-Term, but rather just compares the value of Selling Now with that of a Hold.

Accumulated Sell Now Versus Hold After-Tax Alpha; The aggregate value of Alpha forecasted to be achieved based upon chosen price targets and time horizon, of the tax-lot under consideration within its row, plus all the Alpha values forecasted above, in the ranking process.

Tax Loss Harvesting Matching Shares, Tax Loss Harvesting Alternate Shares; Please see definitions above within the Graph results definitions, or within the Tool-tips accessible within the label links within the Results Set.