7. **Why are historical past rates of return used in calculating the projected rates of return for equites?**

The Projection Assumption Guidelines use a blend of forecasting and backcasting, with the greater weight placed on future assumptions (QPP and CPP actuarial analysis and the 2020 FP Canada/IQPF surveys). A 25% weight is placed on historical real returns for equity assets. Projecting the future by relying solely on historical returns would suggest an expectation that the future will mirror the past. This is not the expectation. While precise future projections should not be made based solely on past performance, that does not justify the complete exclusion of the long-term historical return experience.

Use of the Projection Assumption Guidelines

1. **Why should I use the Projection Assumption Guidelines for my financial planning clients?**

The use of the Projection Assumption Guidelines is strongly encouraged to promote trust and confidence in the financial planner's projections, given the Guidelines' objectivity and basis in reliable sources.

The Guidelines are intended as a guide and are appropriate for making long-term (10 plus years) financial projections that are free from the potential biases of financial planners. Predicting the direction the economy will take and how financial markets will evolve is a difficult exercise, requiring the integration of a large number of variables and highly sophisticated valuation models.

To protect themselves and their clients, financial planners are encouraged to rely on these Guidelines. The use of the Guidelines provides clients with a set of reasonable assumptions that can be supported by sound methods and practice.

When presenting financial projections to clients, it is important to disclose the assumptions and rates being used in the preparation of the projections, and to be able to support them as sound and reasonable.

2. **Should I use the Guidelines in times of market volatility?**

In times of turbulent and volatile markets, it is important to note the long-term nature of these projections. Professional financial planners can provide perspective on shorter-term current events as they relate to clients and their individual circumstances. Planners must always use professional judgement in the application of the Guidelines for long-term projections.

3. **Should I use the Guidelines in times of rising inflation rates?**

In times of rising inflation rates, it is important to note the long-term nature of these projections. For projections with a time frame of 10 years+, it is recommended that the inflation rate calculated and provided in the Projection Assumption Guidelines be used.

Adjusting or increasing the inflation rate to reflect the current economic data is not advised when preparing longer-term projections primarily for two reasons. The current experience of rapidly rising inflation is unlikely to continue over a longer-term time frame of 10 years+. This is supported by the CPI Rates chart provided in the Addendum. Second, increasing just the one data point, e.g., inflation, ignores the corresponding movements that would likely occur with interest rates, fixed-income and equity-based assets.

4. What is required to properly use these Guidelines?

Technical knowledge is at the heart of fundamental financial planning practices. Through certification standards and continuing education, a financial planning professional is expected to have and to maintain high standards of competence and professionalism.

A financial planning professional should therefore have the knowledge and judgment to apply the Projection Assumption Guidelines in an appropriate and reasonable manner, taking into consideration:

- The clients' unique circumstances with regard to socioeconomic status and risk tolerance, at the outset of the financial planning engagement and in the future,
- The operation of financial instruments and markets, the clients' current and future asset allocations, and their approach to investing,
- Average life expectancy and longevity risks, to ensure their clients' financial future is secure, and
- The obligation to discuss the relevance and implications of assumptions with clients so that the clients understand and agree to their use.

5. As a licensed financial planner, am I required to use the rates in the Projection Assumption Guidelines?

The use of the Projection Assumption Guidelines is beneficial for both the financial planning professional and the client. It provides a level of protection for financial planners since their projections are based on sound assumptions that can be defended. For clients, the Guidelines provide rates of return that are transparent and objective, based on reliable sources.

That said, financial planners are in the best position to understand their clients' unique circumstances. Because every client situation is different, assumptions that vary from the Guidelines may be used. It is also important to note that the Guidelines do not contemplate personal risk profiles. Since an individual's risk profile or change in risk profile may have consequences at least as significant as, or more significant than the rate of return guidelines used in developing financial projections, sound risk assessments are critical.

Assumptions may also differ from the Guidelines based on local market peculiarities. As an example, projections of education costs, which tend to be impacted by local market differences, may justify using an inflation rate that differs from the Guidelines. Projections of

salary increases may justify an inflation rate that differs from the Guidelines, where clients give good reason for the change.

For shorter term financial projections (less than 10 years), financial planners may use actual rates of return on fixed term investments held to maturity.

In all cases, assumptions used should be documented, with sound rationale, and clearly communicated to clients.

6. Is it a breach of professional responsibilities to use rates other than those in the Projection Assumption Guidelines?

The use of the Projection Assumption Guidelines is beneficial for both the financial planning professional and the client. It provides a level of protection for financial planners since their projections are based on sound assumptions that can be defended. For clients, the Guidelines provide rates of return that are transparent and objective, based on reliable sources.

Financial planners are encouraged to use and rely on these Guidelines. Where appropriate, financial planners may deviate within plus or minus 0.5% from the rate of return assumptions and continue to be in compliance with the Guidelines.

That said, financial planners are in the best position to understand their clients' unique circumstances. Because every client situation is different, assumptions that vary from the Guidelines may be used. In addition, for shorter term financial projections (less than 10 years), financial planners may use actual rates of return on fixed term investments held to maturity.

There may be instances when it is appropriate to deviate from the rates of return provided in the Guidelines. If this occurs, the financial planner should document the rates used and the rationale to ensure the assumptions are both sound and supported. These assumptions should be discussed with clients to ensure they understand them and are comfortable with their use.

Questions regarding the Projected Rates in the Projection Assumption Guidelines

1. Do the rates of return include inflation?

The rates of return shown in section 4 of the Projection Assumption Guidelines are gross nominal rates that have been adjusted to include inflation. For the guidelines that are based on historical data, the adjustment is based on the guideline for future inflation. The Addendum which accompanies the Guidelines details the calculation behind the rates of return.

2. Why is there a different rate used for salary and inflation assumptions?

In 2015, the Guidelines introduced an assumption for the growth of the yearly maximum pensionable earnings (YMPE). When doing financial planning, some variables are tied more closely to the inflation rate and others to the growth of salary. For example, the income tax tables (tax brackets, credits, etc.), the annual TFSA contribution limit and the Old Age Security payment are amounts that are rising in accordance to inflation. However, the Canada Pension Plan maximum benefit is growing at the pace of the YMPE before retirement. Once the benefit is payable, the annual indexation is based on inflation. The maximum RRSP limits and pension limits for registered pension plans (DB and DC) are adjusted annually on the growth of the salary, so the use of the YMPE assumption is better suited than the inflation assumption. For the salary growth of an employee that is planning for retirement over a long career, either inflation or YMPE growth on his future salary could be used. Usually with salary growth there is a component for inflation and another for promotion. To be more conservative, a financial planner could prefer using inflation, but a good conversation between the financial planner and the client will help to determine the proper expected salary growth.

3. What about the impact of income tax on portfolio returns?

The rates of return presented in the Projection Assumption Guidelines do not include income tax. The Guidelines state that income tax is a consideration for non-registered assets.

The client’s asset allocation will help determine the type of investment income to be earned. Historically, from 25% to 50% of overall equity returns has been made up of dividends. The Guidelines suggest that for equity holdings, it might be appropriate to divide the return into two categories: dividends and capital gains, and suggest that 33% of the return be taxed as dividend income and the balance as realized and unrealized (deferred) capital gains.

Determining the income tax liability on investment income earned in a non-registered account will require additional work by the financial planner to factor in the preferred tax treatment on Canadian dividend income and realized capital gains, as well as the client's tax rate.

4. Why are the short-term assets and fixed-income rates so high?

The assumptions for short-term and fixed-income assets represent a long-term view of what level of return could be earned by these two asset classes. They do not represent short-term expectancy. Effective with the release of the 2020 Guidelines, the 50 years of Historical Data is no longer included in the calculation of the projected rates for short-term and fixed-income assets. This data source showed as a significant outlier for both the short-term and fixed-income calculation inputs. The removal of the historical data in the calculations resulted in lower projected rates for short-term and fixed-income assets.

5. Why are the rates of return on equities so low?

The assumptions for equity assets represent a long-term view of what level of return could be earned by this asset class. They do not represent short-term expectancy. Different rates of return are provided for Canadian equities, foreign developed-market equities and emerging-market equities.

6. Why are the longevity assumptions so long?

The Projection Assumption Guidelines present several levels for the probability of survival and recommend projection periods to the age that an individual has only one chance in four to reach. This period is longer than life expectancy to add security to financial planning exercises.

When presenting financial projections to clients, it is important to disclose the assumptions being used in the preparation of the projections, and to be able to support them as sound and reasonable.

7. In section 6 of the Projection Assumption Guidelines document, the sample application uses a single fee charge, but what if there are other fees?

The rates of return are presented before any fee expenses. The fee amount used in the sample application is meant to be an example only, and <u>not</u> a directive on an expected charge amount.

Any fees paid by the clients need to be subtracted from the rates of return to arrive at their net return. Fees paid by clients can include a variety of different costs, such as, commissions, trailing fees, advisory fees, custodian fees, redemption fees, transaction costs, and management expenses ratio fees. All fees paid by the clients, either directly or indirectly, needed to be factored into the calculation to arrive at their actual return net of costs.

8. Does the portfolio shown in section 6 of the Projection Assumption Guidelines document provide a recommendation on asset allocation?

No, the sample application is not intended to offer a suggestion or recommendation on asset allocation.

Section 6 of the Projection Assumption Guidelines is included to illustrate how the projected rates can be applied when different asset groups are held in an investment portfolio. The sample application is not meant to be a recommendation for asset weightings, but rather to show how to use the rates for various investment holdings.

9. How would a conversion be done from a return calculated using geometric mean assumptions, as presented in the Guidelines, to one using arithmetic mean assumptions?

In certain circumstances, it can be appropriate to convert the assumptions from the geometric mean (GM) to the arithmetic mean (AM). The GM is the annualized rate of return. The AM is simply the total of a series of rates of return, divided by the number of returns, an easy, simple average. The table below shows an example with the Canadian stock market for a ten year period, the AM, the GM and the standard deviation. With this information, it is possible to estimate the AM from the GM with the standard deviation (σ). Using this formula for equity assets:

AM (est) = GM from the Guidelines + 0.5 % + $\sigma^2/2$

an estimated AM of 7.65 % is calculated, which is very close to the real AM of 7.55% (only an error of 0.10%).

Year	S&P/TSX		GM	Annualized Investment of $1,000.00
2010	17.61%	n/a	17.61%	$1,176.00
2011	-8.71%	n/a	3.62%	$1,073.66
2012	7.19%	n/a	4.80%	$1,150.86
2013	12.99%	n/a	6.79%	$1,300.35
2014	10.55%	n/a	7.53%	$1,437.54
2015	-8.32%	n/a	4.71%	$1,317.94
2016	21.08%	n/a	6.90%	$1,595.76
2017	9.10%	n/a	7.18%	$1,740.97
2018	-8.89%	n/a	5.26%	$1,586.20
2019	22.88%	GM	6.90%	$1,949.12
Total	75.48%	$(\sigma^2) / 2$	0.75%	n/a
AM	7.55%	AM (est)	7.65%	n/a
SD (σ)	12.23%	n/a	n/a	n/a

Questions regarding Asset Groups not included in the Projection Assumption Guidelines

1. **The rate of inflation in the Projection Assumption Guidelines is not consistent with the growth in real estate values in my region. What rate should I use when preparing projections for my clients?**

The Projection Assumption Guidelines are intended to be used when making long-term projections of 10 years or more, and are meant to look beyond the current day rate environment. Although the inflation experience in your region today may exceed the inflation rate in the Guidelines, this may not be the case over the next 20 or 30 years.

The Guidelines provide rates of return for the main asset classes—short-term assets, Canadian fixed --income, Canadian equities, foreign developed market equities (including U.S. equities and Europe, Australia and Far East equities) and emerging market equities.

However, the Guidelines do not provide a rate of return for real estate. When making assumptions around real estate growth, it is important to consider an appropriate starting valuation for the property and use an inflation-based assumption that is suitable based on the local market context.

When presenting financial projections to clients, it is important to disclose the assumptions and rates being used in the preparation of the projections, and to be able to support them as sound and reasonable.

2. **What rate of return should be used for preferred shares?**

The projected fixed-income rate of return in the Projection Assumption Guidelines can also be applied to preferred share holdings. Please note that this is not an opinion regarding the volatility of preferred shares versus fixed-income securities and that preferred shares can have different characteristics that can impact their pricing.

3. **What rate of return should be used for currencies?**

The Projection Assumption Guidelines do not provide for exchange rates since the net long-term effect of changes in exchange rates is generally nil. Financial planners should develop sensitivity analysis to illustrate and assess the potential ramifications of changes in exchange rates. Clients who may require income in a foreign currency may wish to maintain assets in that foreign currency to avoid foreign exchange rate risk.