



TAB 5

OPERF: RISK SURVEY RESULTS

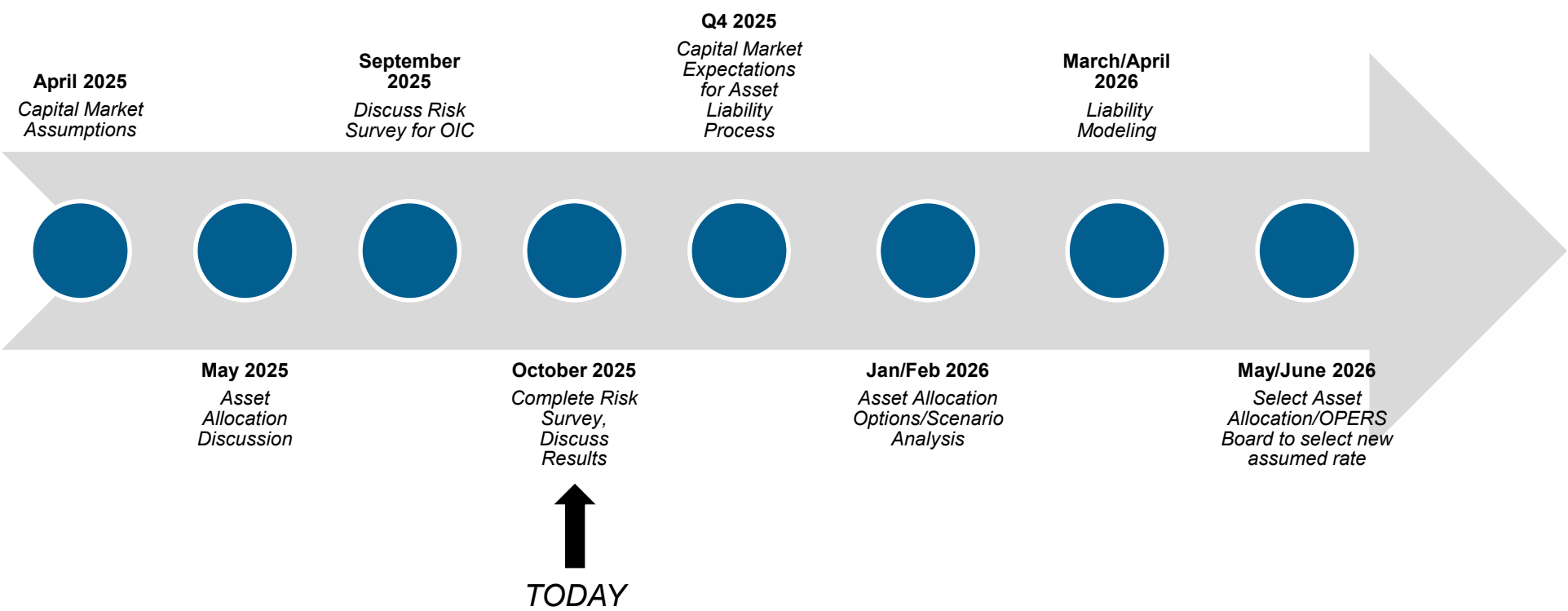
Oregon Investment Council

October 2025

Asset Liability Study: Risk and
Implementation Survey Results

Asset-Liability Study: Risk and Implementation Survey Results

Asset-Liability Study Timeline | April 2025 – June 2026



Asset-Liability Study: Risk and Implementation Survey Results

Introduction

- This report presents the responses to the 2025 Risk and Implementation Survey.
- Results are separated for each question: 1) Council and 2) Staff.
- Total responses: six OIC members and nine Staff.
- We have highlighted areas of agreement and disagreement between the two groups.
- Additional dialogue during the presentation will enhance the takeaways and utility of the exercise.
- The results of the survey serve as a foundation for the asset-liability modeling process. They begin to frame the inputs (e.g., classes and constraints) and outputs (e.g., key metrics and characteristics) of the process.

Key Takeaways

- For the vast majority of topics, there is a high level of consensus within each of the respective groups (i.e., within the OIC and within Staff).
 - Furthermore, the OIC and Staff share similar viewpoints on most topics.
- The results support the current trajectory of the OIC/OPERF. There is nothing in the results that suggests a material deviation from the current strategic allocation and risk posture is desired.
- Primary objectives highlighted through responses:
 - Maintain consistent progress on funded ratio.
 - Avoid major drawdowns, and focus on corresponding implications of negative net cash-flow.

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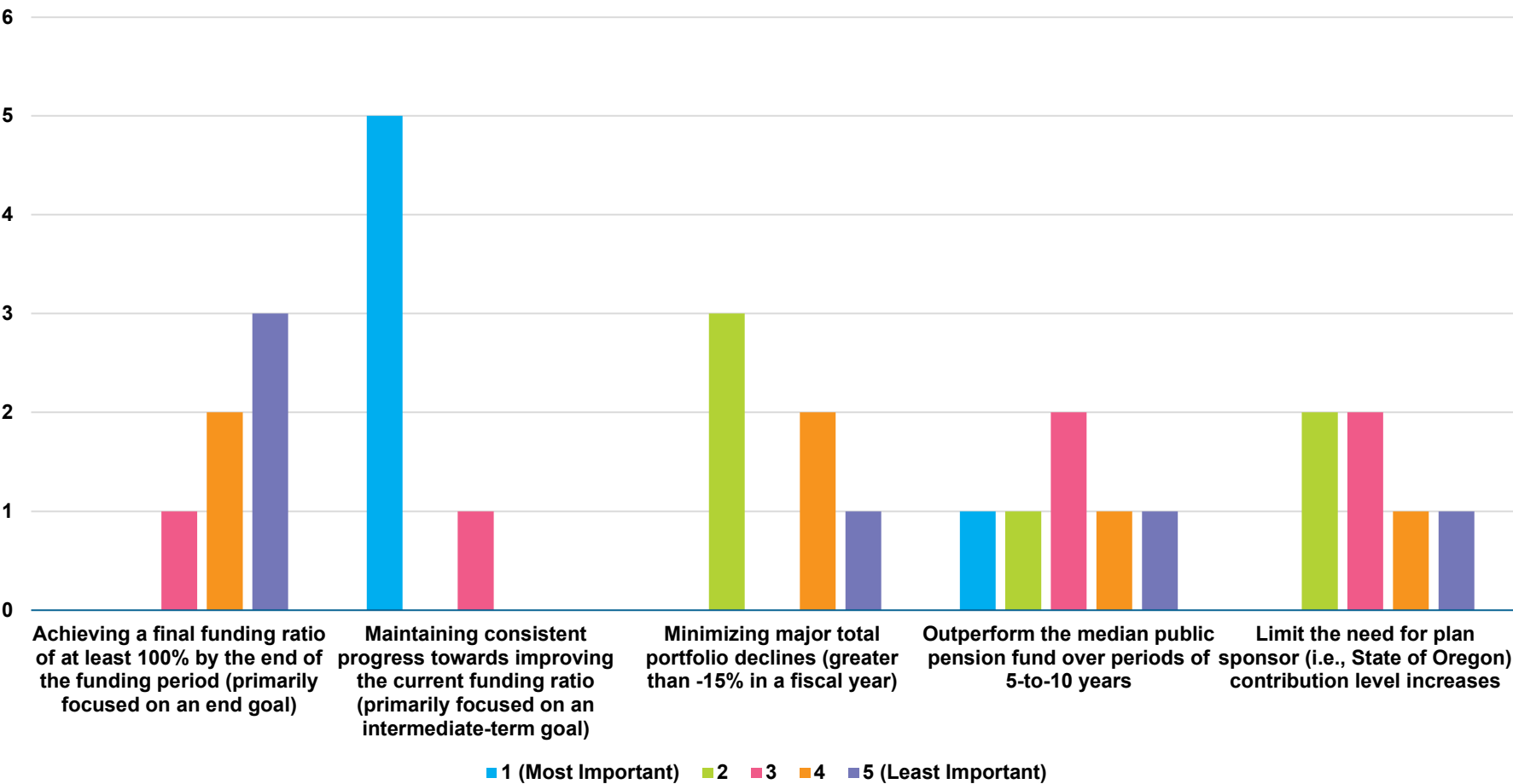
Key Takeaways (continued)

- As it relates to existing and potential classes, the following were areas of consensus:
- Continue to include illiquid strategies and examine all strategies based on net-of-fee results.
 - Maintain a global orientation within asset classes, particularly as it relates to public equity.
 - While the Diversifying Strategies class is viewed as valuable, there needs to be further education as to what can and cannot be included in the class. Education on equity hedging strategies should also be included.
 - Segment the Fixed Income asset class during the asset-liability study and corresponding asset allocation options.
- As a reminder, a similar survey was conducted in 2022.
- Generally speaking, the 2022 and 2025 results were congruent. The differences that exist do not relate to a reversal of opinion/belief, but rather, less consistency among related questions.
 - Primary differences (all marginal):
 - A more consistent view on risk tolerance across questions in 2022.
 - A more consistent view on peer-relative results across questions in 2022.
 - The current market backdrop (i.e., all-time highs for equity markets, challenges within private markets, etc.) are likely influencing the inconsistencies highlighted above.

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1. Please rank the following objectives in order of importance with 1 being most important and 5 being least important.

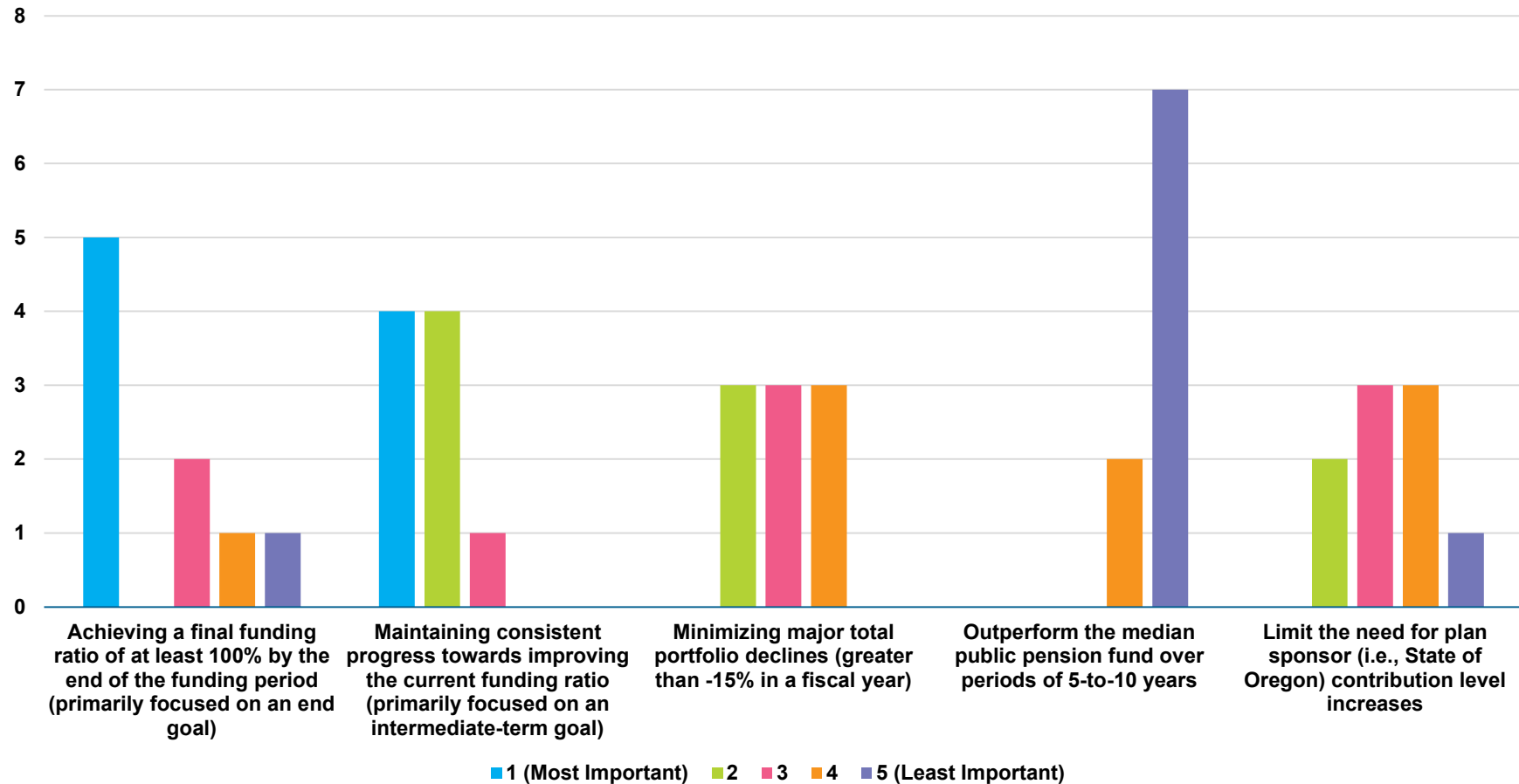
Council



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1. Please rank the following objectives in order of importance with 1 being most important and 5 being least important.

Staff



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1. Please rank the following objectives in order of importance with 1 being most important and 5 being least important.

→ **Takeaways**

- Both Council and Staff view funded ratio improvement as a key objective.
- Staff was split between the two variations of the goal (intermediate term vs. end goal) whereas the Council had complete consensus that making consistent progress (intermediate term) on the funded ratio is the key priority.
- Drawdown experiences, expressed as a total portfolio decline or its potential manifestation via contribution increases, were also important to both groups.
- The Council's viewpoint on outperforming peers was diverse, whereas Staff indicated that this is a low priority goal.

→ **Next Steps**

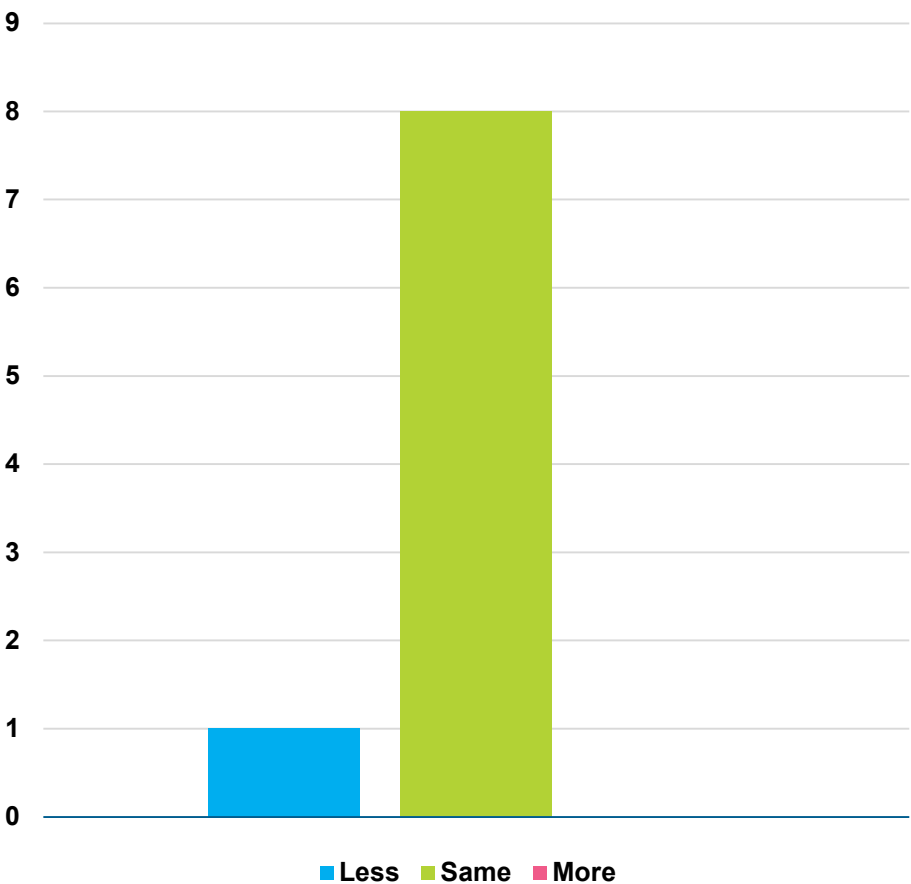
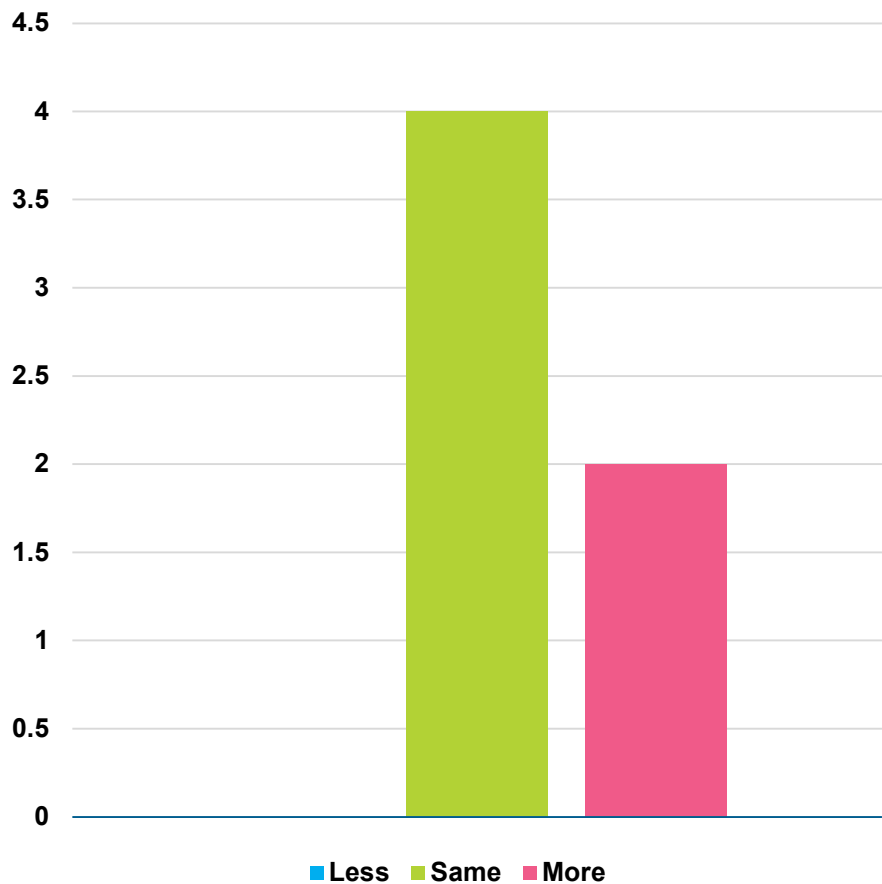
- Align asset liability modeling output to:
 - Examine funded ratio outcomes over both intermediate and long horizons.
 - Discuss drawdown probabilities as well as potential contribution impacts to different asset allocations and scenarios.

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2. To achieve long term goals, should the OIC be taking more, less, or the same amount of investment risk in the OPERF portfolio?

Council

Staff



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→ **Takeaways**

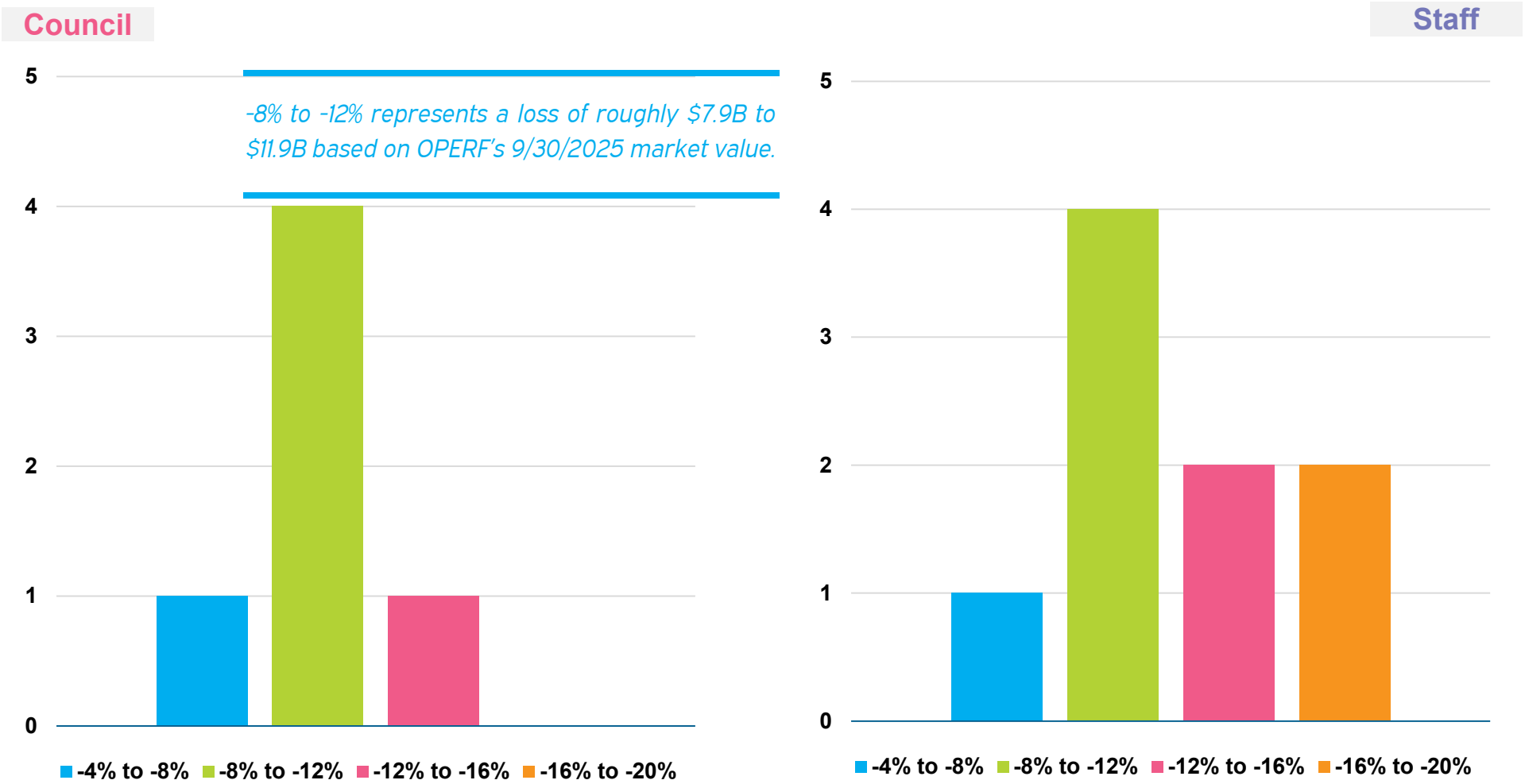
- Both Council and Staff generally prefer maintaining current risk levels to achieve long term goals
- Of note, the 33% of the Council are interested in increasing the risk level of the portfolio, whereas one member from the Staff's responses indicated a preference to decrease the risk level.

→ **Next Steps:**

- During the asset-liability study, our options will focus on a similar level of risk as the current portfolio, but higher risk portfolios (and potential implications thereof) will also be explored.

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3.In your opinion, what would be considered to be a bad but not necessarily a catastrophic year?



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3. In your opinion, what would be considered to be a bad but not necessarily a catastrophic year?**→ Takeaways**

- Opinions regarding a bad, but not catastrophic year are relatively aligned at -8% to -12%.
- Amongst staff, there is some tolerance for worse returns.
- Compared to the 2022 survey, there has been a shift towards a more conservative approach when defining a bad year. (2022 consensus was -12% to -16%).

→ Next Steps

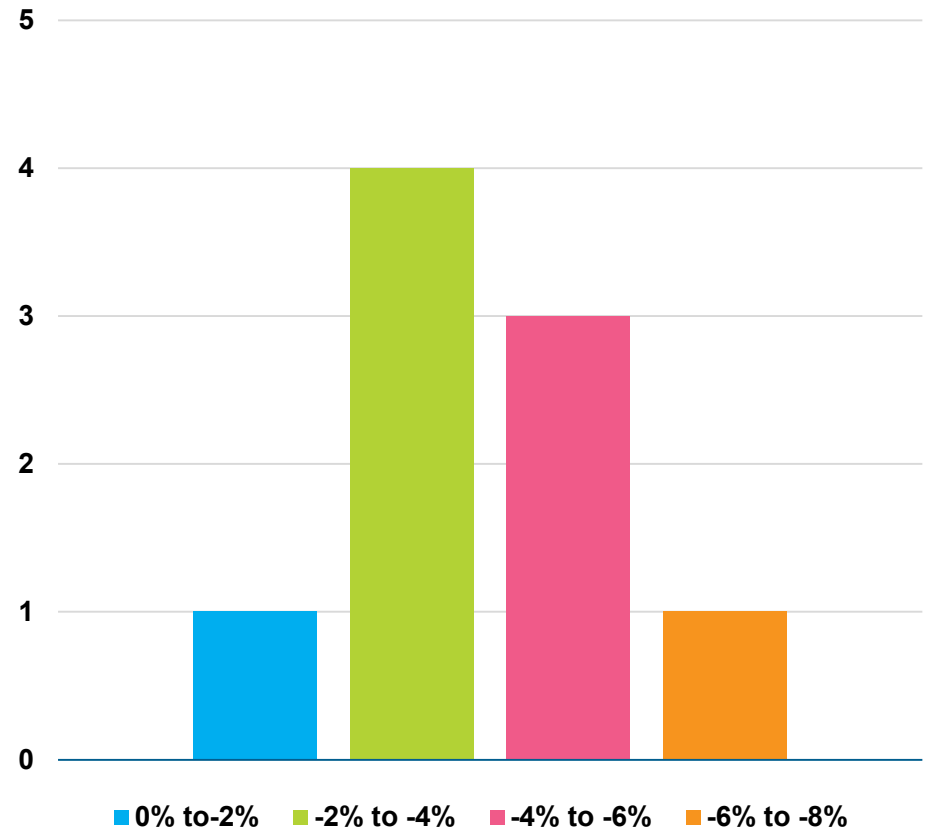
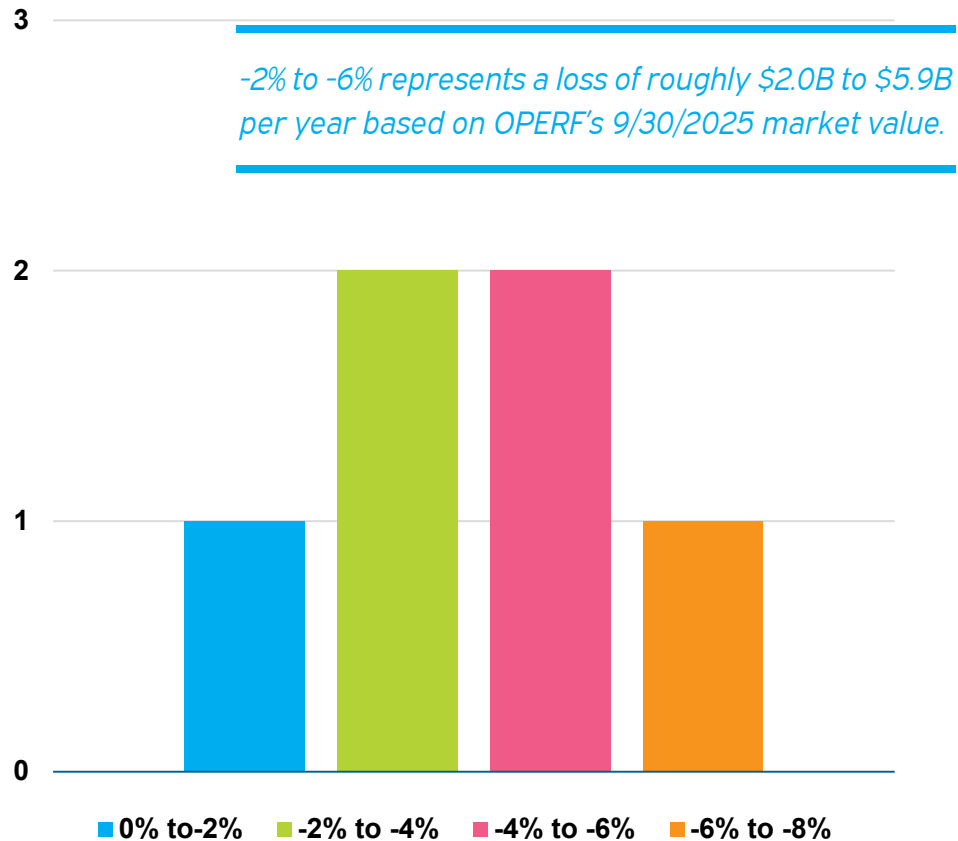
- During the asset-liability study, there will be an explicit discussion regarding the probabilities of experiencing annual declines within the highlighted ranges, depending on the asset allocation targets chosen.

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4. In your opinion, what would be considered to be a bad but not necessarily a catastrophic annualized return over three years?

Council

Staff



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4. In your opinion, what would be considered to be a bad but not necessarily a catastrophic annualized return over three years?**→ Takeaways**

- Over a three period, there is general consensus that an annualized return of -2% to -6% would be bad, though not considered catastrophic.
- When comparing the responses to #3 (one year) and #4 (three year), the results are generally consistent with one another. The probability of experiencing a 1-year decline of -8% to 12% is similar to the probability of experiencing a 3-year annualized return of -2% to -4%.

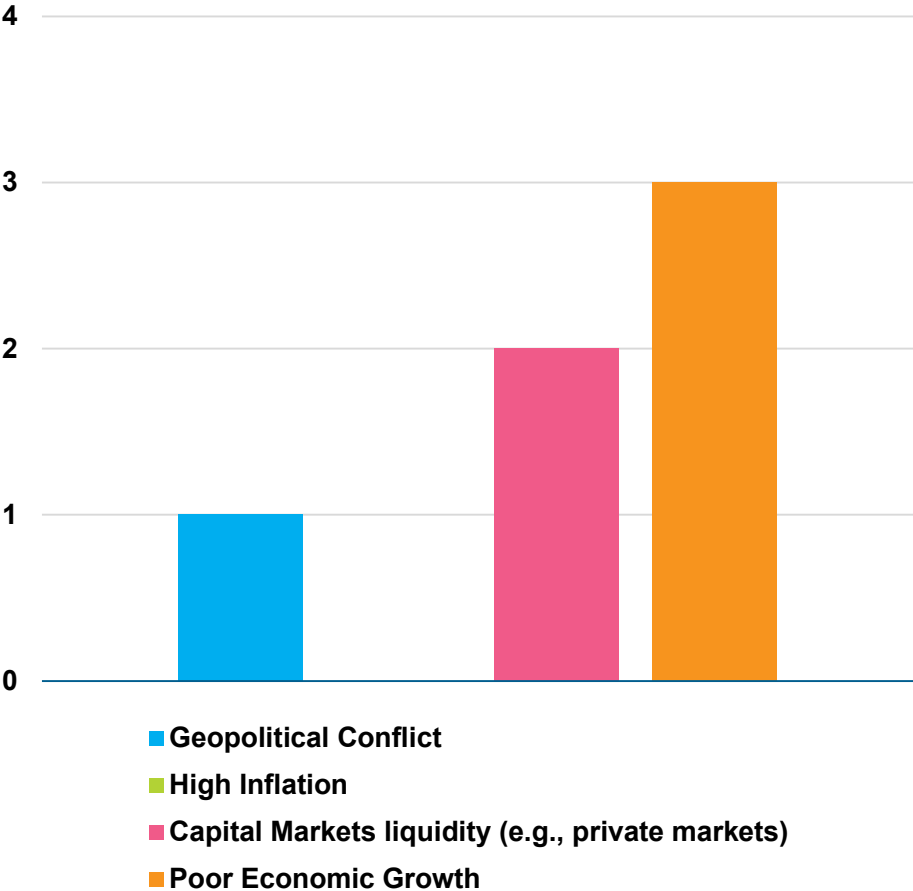
→ Next Steps

- Manage risk through diversification and uncorrelated asset classes to mitigate the chance of extended periods of Total Plan negative returns
- Discuss the implications (i.e., contribution levels) of multi-year periods of returns well below the actuarial rate.

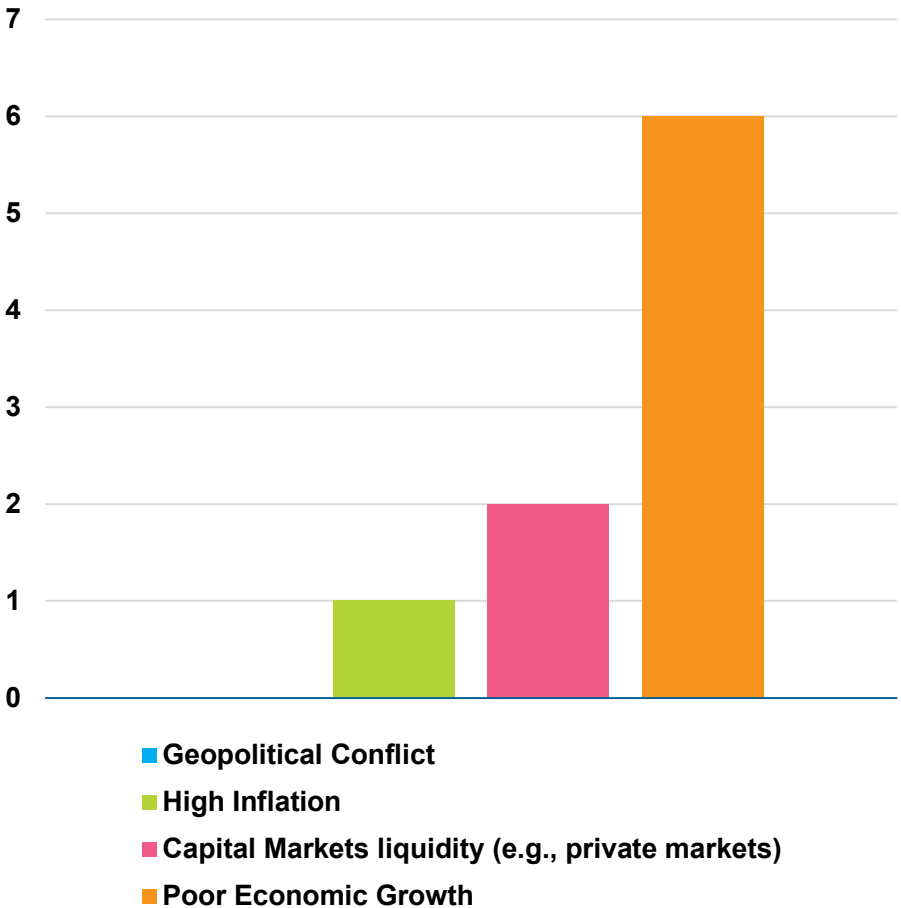
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5. As an OIC member, I am most concerned with which of the following macroeconomic issues (and its impact on OPERF) over the next 2-5 years?

Council



Staff



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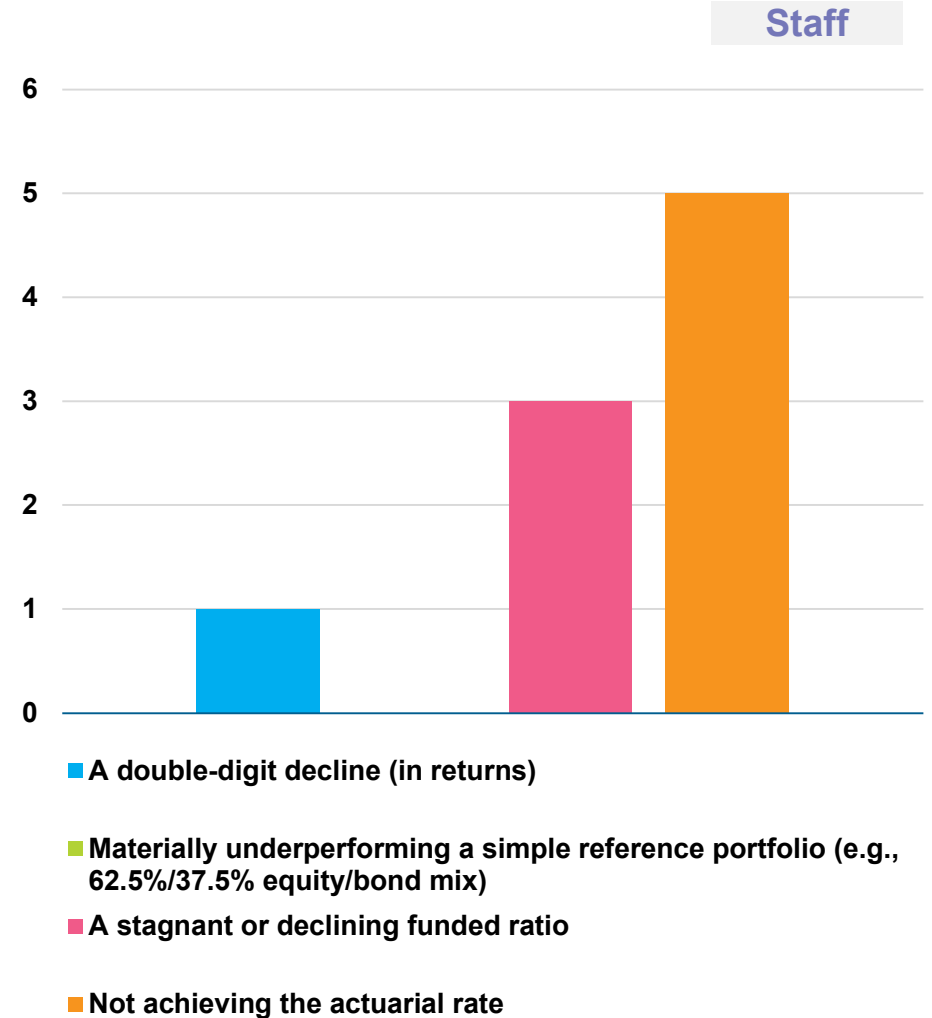
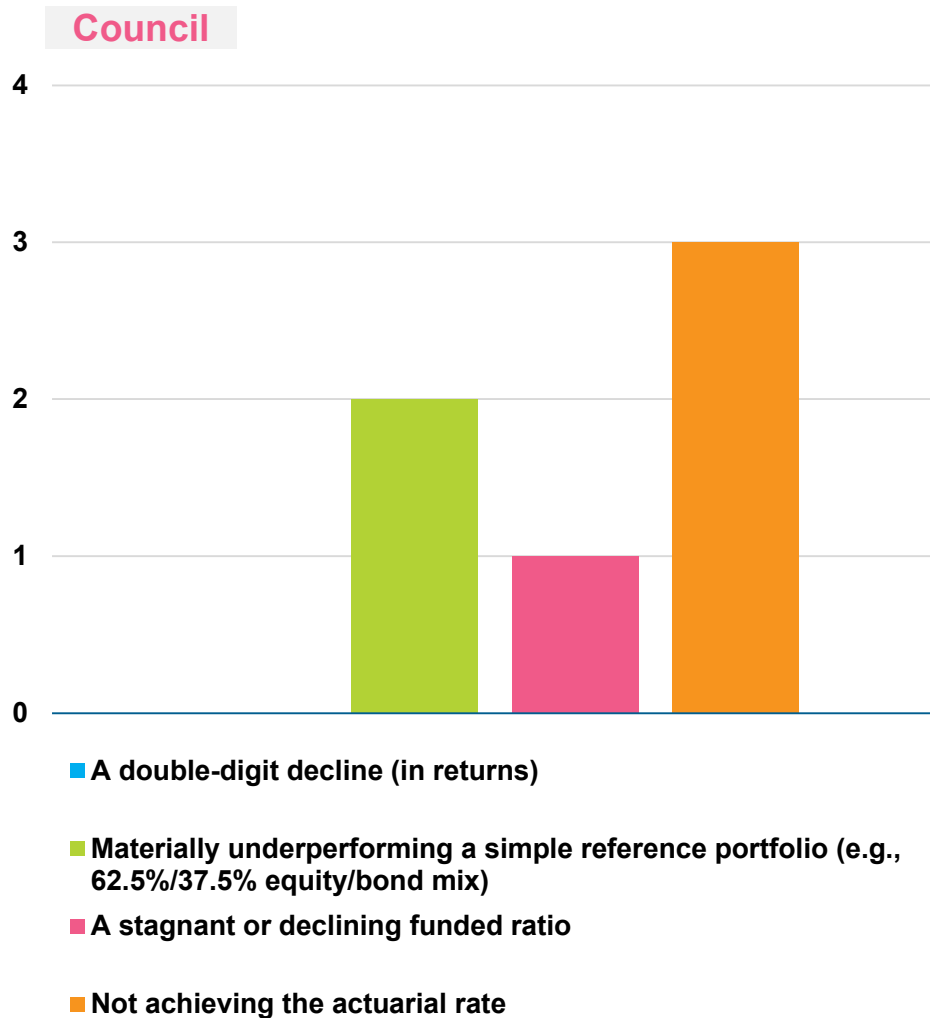
- Poor Economic Growth and Capital Markets liquidity were the major areas of concern for both Council and Staff members over the short term, although council members were relatively split between concerns.

→ Next Steps

- Discuss the impact of poor economic growth on portfolio assets and how to mitigate the negative impacts of such events.
- Discuss potential options for mitigating challenges associated with capital markets liquidity challenges.

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6. Which of the following outcomes is of the greatest concern over the next 10 years?



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→ Takeaways

- Not achieving the actuarial rate was the primary long-term concern for both Council and Staff.
- Stagnant and declining funded ratio was also a concern for a few respondents.

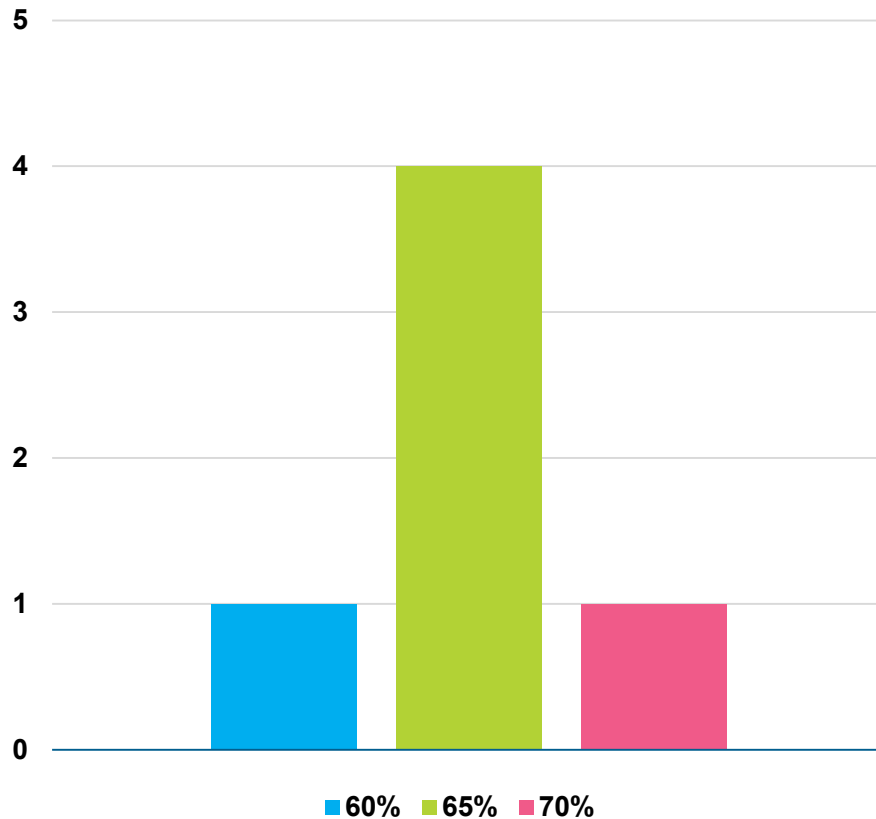
→ Next Steps

- While being consistent with the Council's risk tolerance, pursue an asset allocation that maximizes the probability of matching or outperforming the actuarial rate over long-term horizons.

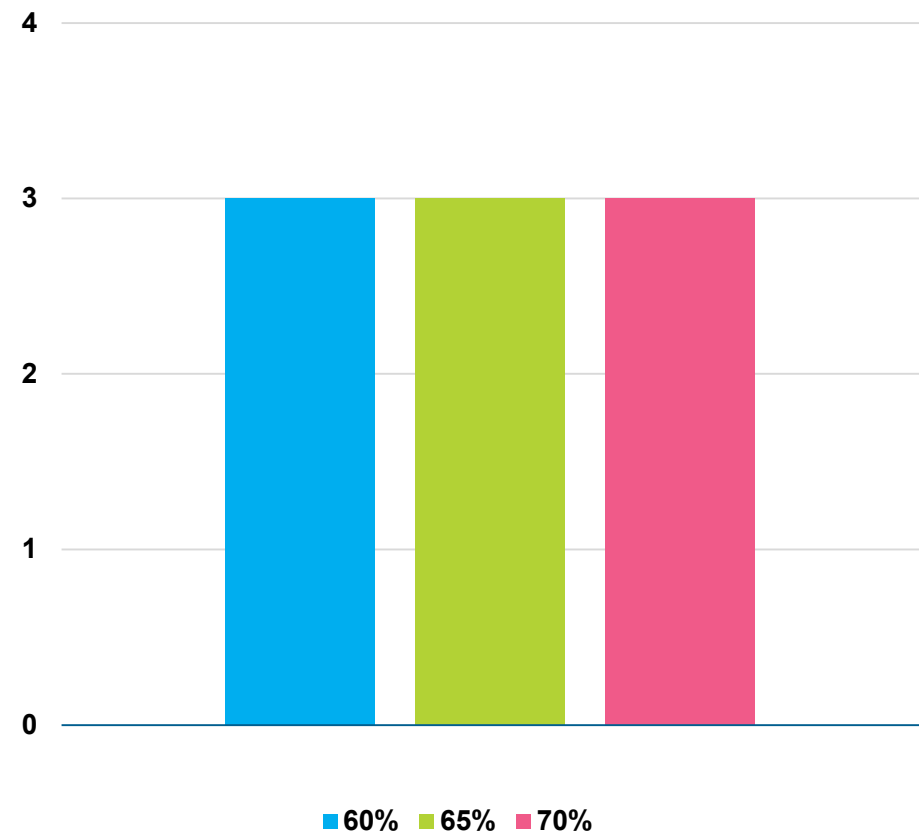
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7. What is the minimum funded ratio (with side accounts) that you would be willing to accept in a market crisis scenario (i.e., very rapid deterioration in economic conditions)? Current = ~77% (with side accounts) and ~72% (without side accounts).

Council



Staff



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7. What is the minimum funded ratio (with side accounts) that you would be willing to accept in a market crisis scenario (i.e., very rapid deterioration in economic conditions)? Current = ~77% (with side accounts) and ~72% (without side accounts).

→ Takeaways

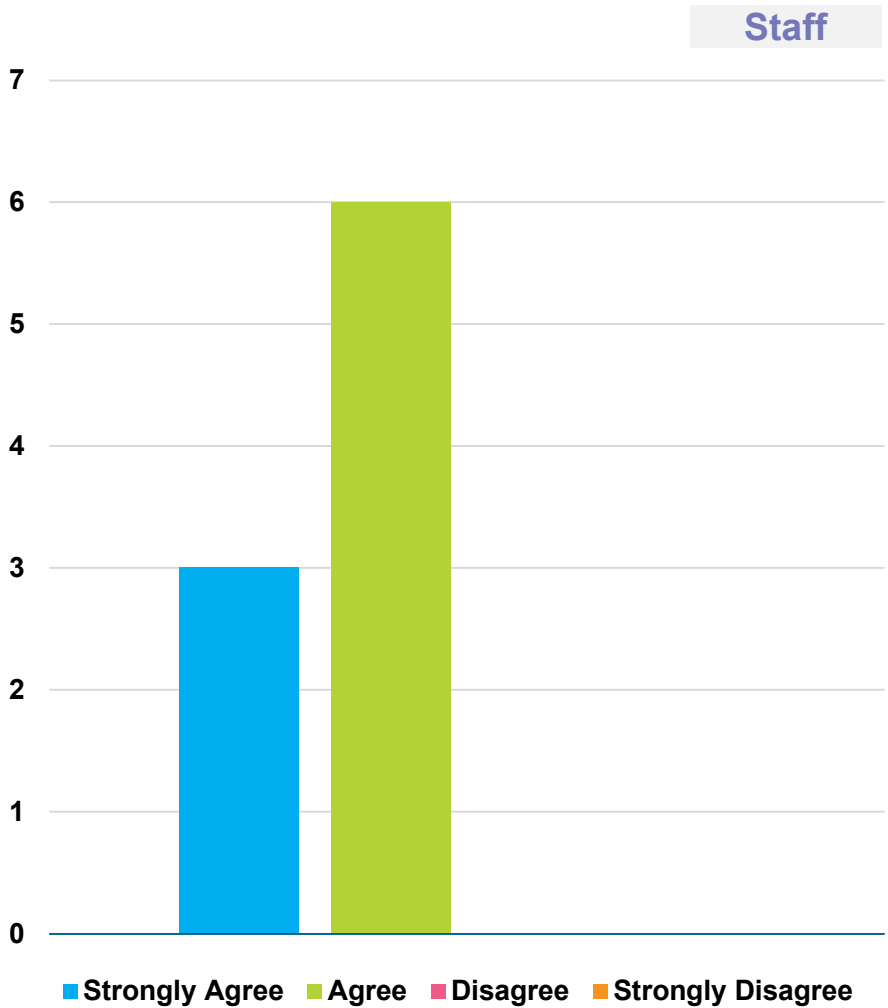
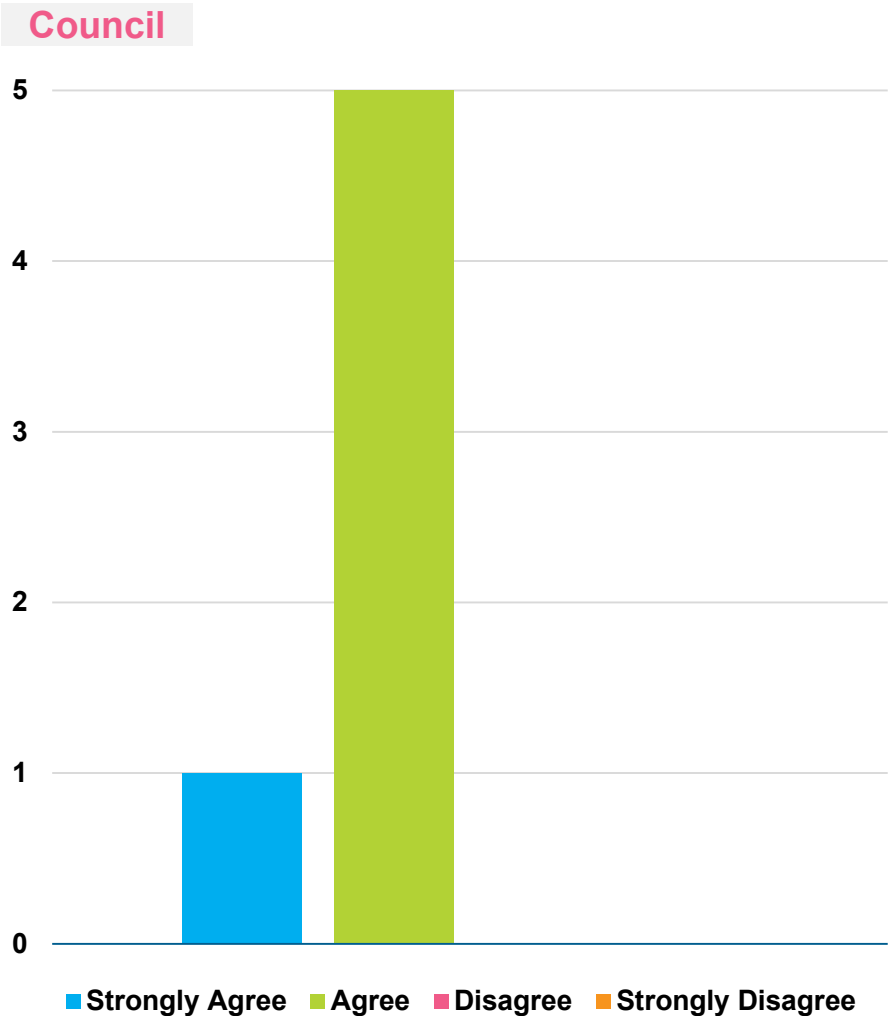
- 83% of OIC respondents do not want to see the funded ratio drop below 65% during a market crisis.
- Of note, OPERF experienced a roughly 30% drop in funded ratio during the Global Financial Crisis (from 2007-2008).
- Staff and OIC are generally aligned as it relates to funded ratio decline thresholds.

→ Next Steps

- Prioritize strategies that support actuarial rate achievement.
- During the asset-liability study, discuss the probabilities of OPERF dropping below funded ratio thresholds for different asset allocation options.

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8. The Diversifying Strategies class can provide stability in funded ratio level over time.



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→ Takeaways

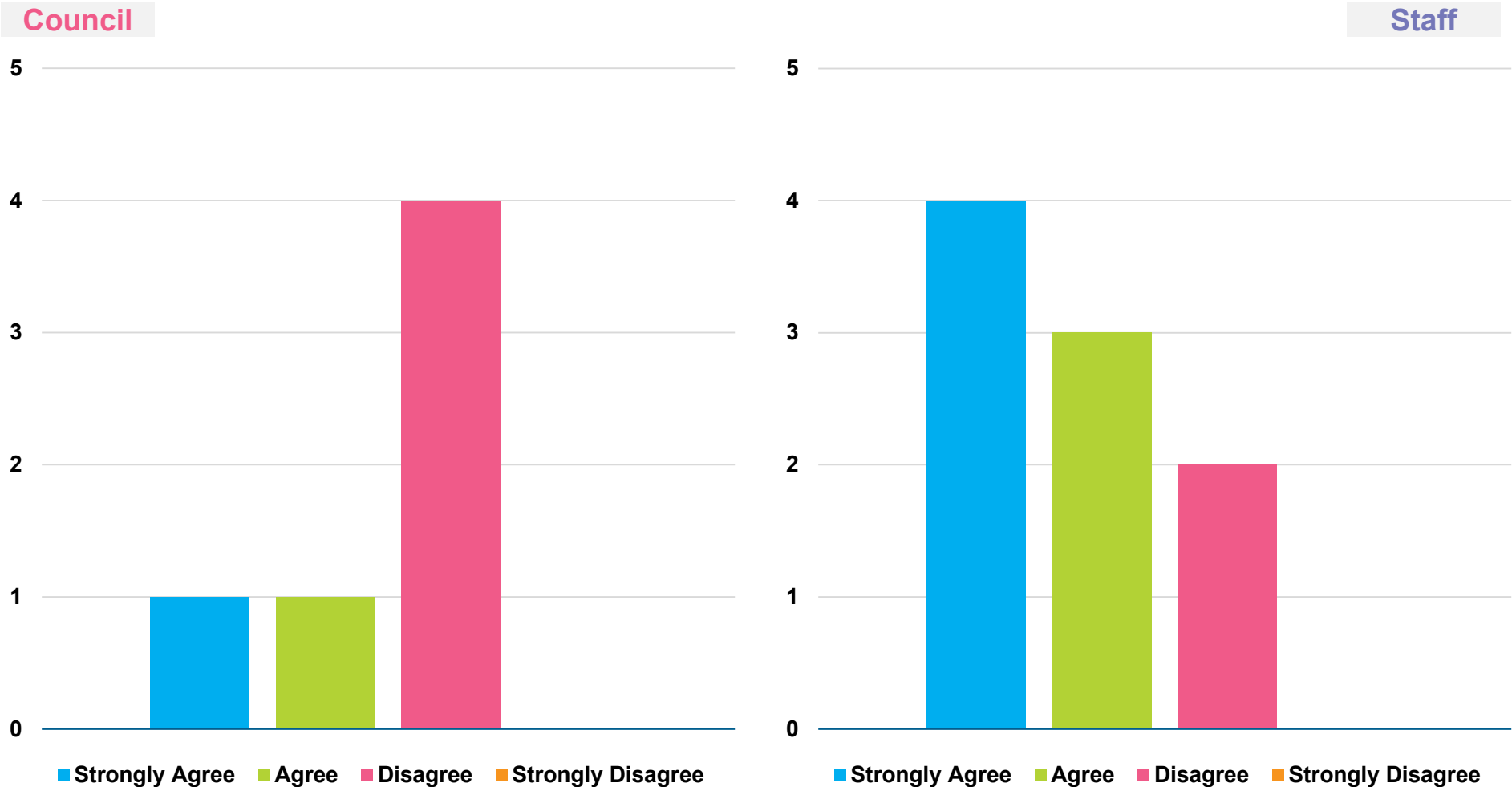
- There is a high level of consensus among the OIC as it relates to the utility of the Diversifying Strategies class.
- Similar to the OIC, Staff indicated a high level of consensus that the Diversifying Strategies class can improve the stability of the funded ratio over time.

→ Next Steps:

- Include Diversifying Strategies asset classes in various alternative asset mixes.

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9. It is straight-forward to understand what can and cannot be included in the OPERF’s Diversifying Strategies class.



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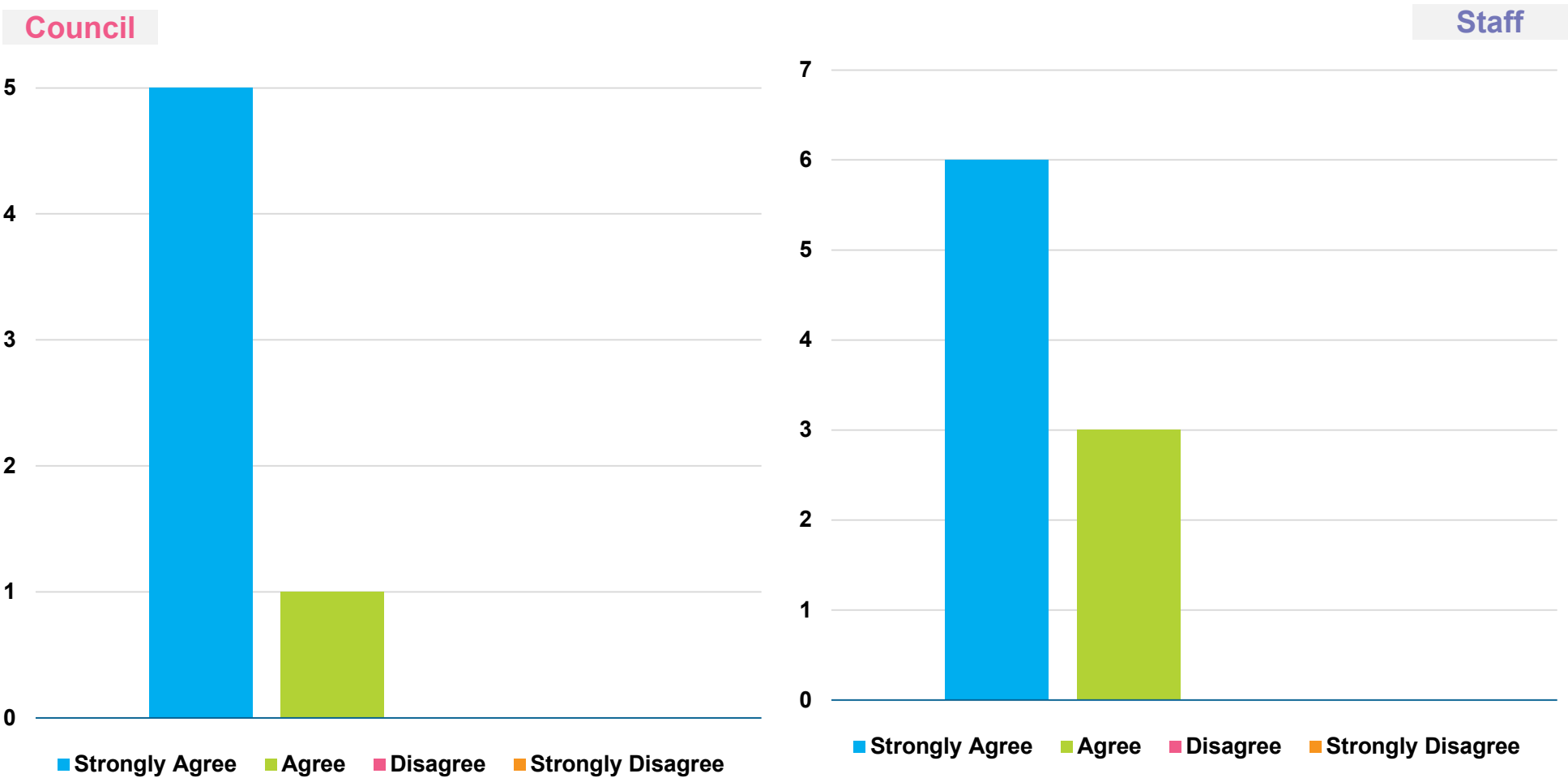
- While the OIC agrees that the Diversifying Strategies class is of value, 2/3 of OIC respondents do not agree that it is straight-forward to understand what can and cannot be included in the class.
- From Meketa's experience, this is a common perspective as it relates to this type of functional class.
- Staff's understanding is mixed as it relates to what can and cannot be included in the Diversifying Strategies asset class.

→ Next Steps

- Provide additional education and training during the ALS process around what can and cannot be included in the Diversifying Strategies asset class.

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10. The cash-flow position of the Fund (e.g., net positive contributions or net negative benefit payments) is an important consideration when constructing an investment portfolio.



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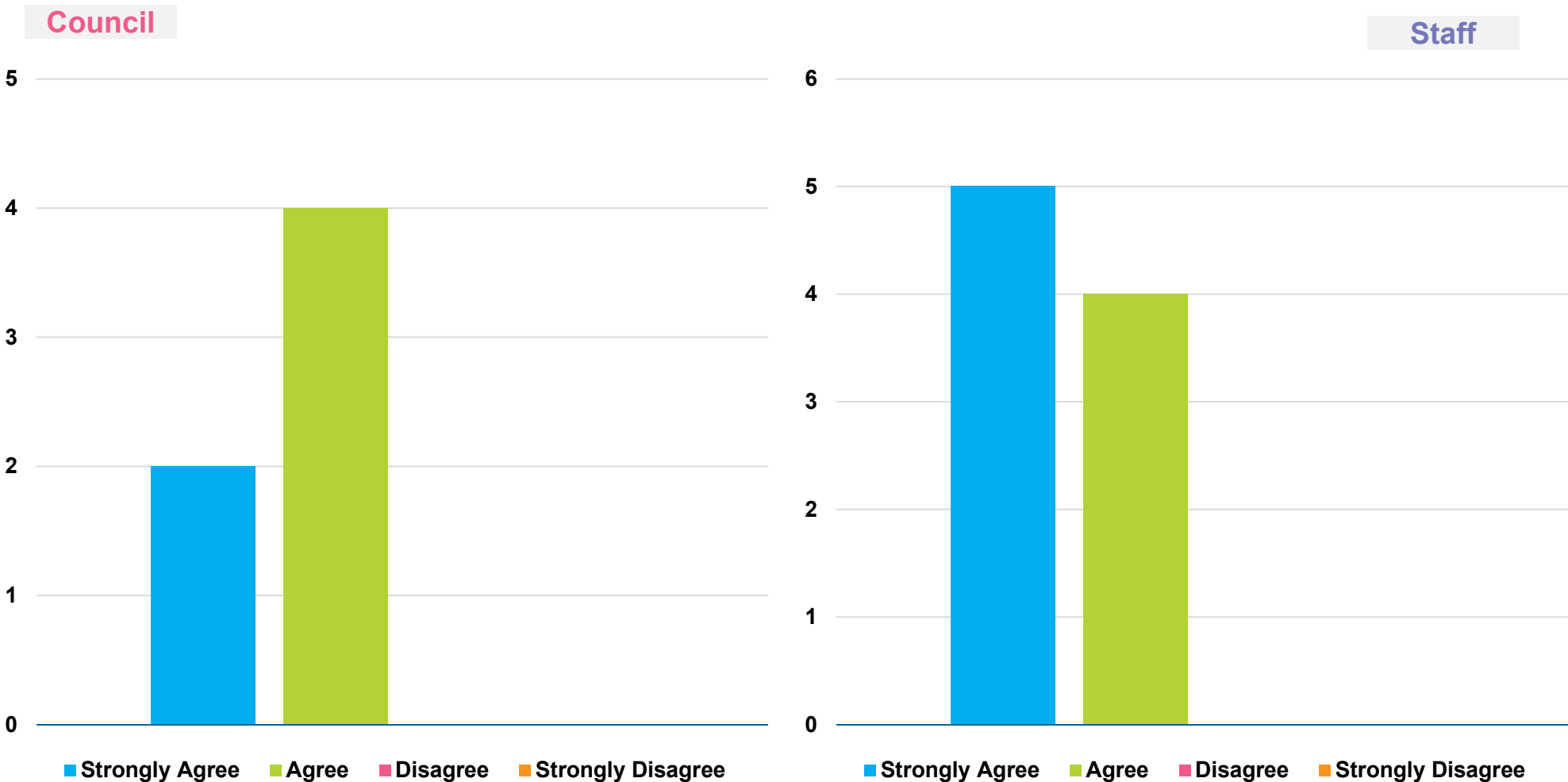
- This is the one question in the survey where there are correct (strongly agree or agree) and incorrect (disagree or strongly disagree) answers.
- Both the Council and Staff understand the importance of the net cash-flow position of OPERF as it relates to asset allocation mixes and overall system success.

→ Next Steps

- Cash-flows are directly incorporated into the asset-liability modeling process, and their impacts can influence what may be considered “optimal” portfolios.

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11. Opportunistic investments have the potential to add value.



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→ Takeaways

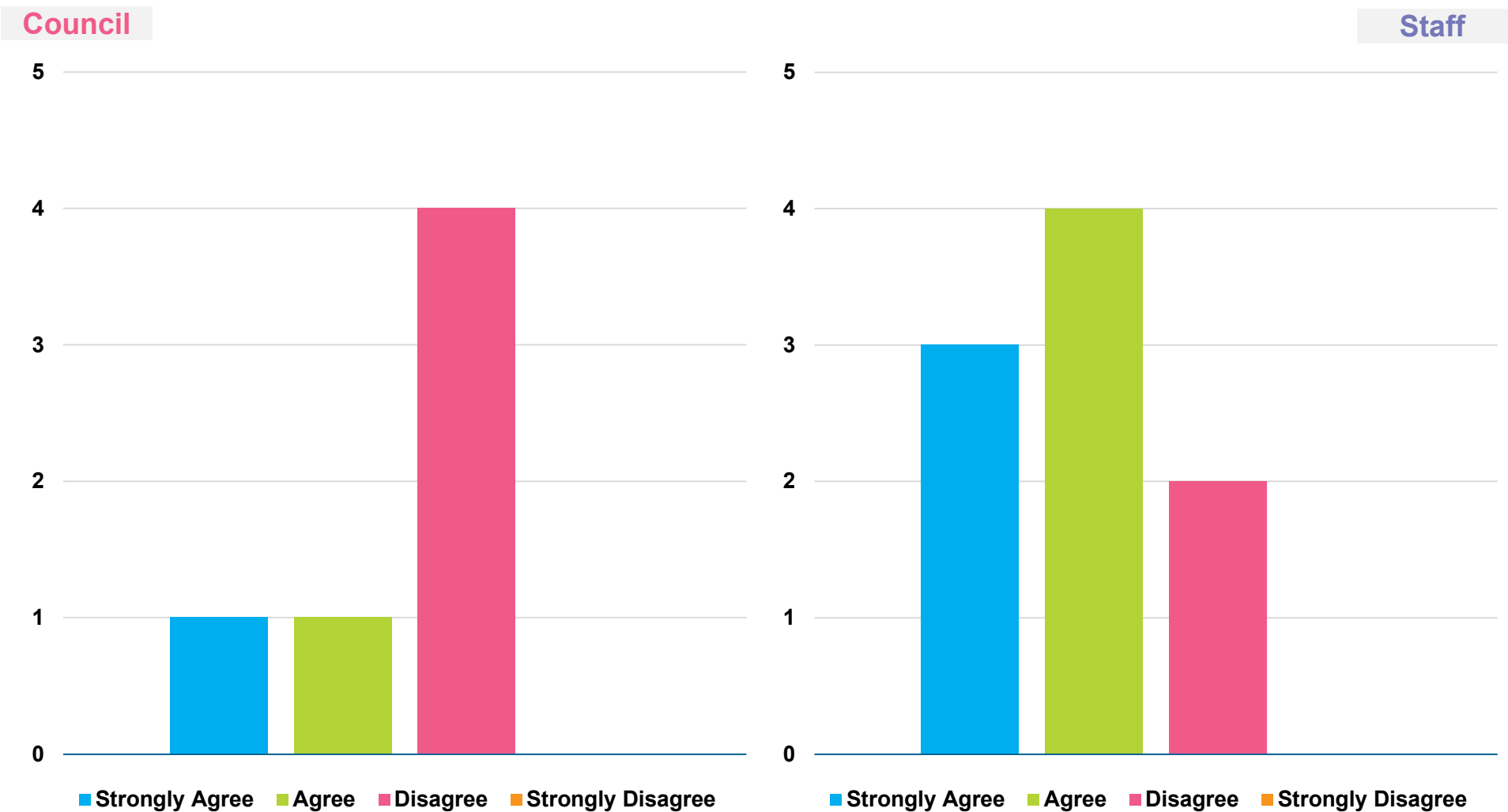
- All OIC respondents either agreed or strongly agreed in the value add behind opportunistic investments.
- Similar to the OIC, all Staff respondents either agreed or strongly agreed in the value add behind opportunistic investments.

→ Next Steps

- Continue to maintain portfolio flexibility within policy, but highlight how exposure to this asset class necessarily means another asset class has less exposure, given a 0% target.

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12. It is straight-forward to understand what can and cannot be included in the Opportunity class.



12. It is straight-forward to understand what can and cannot be included in the Opportunity class.

→ Takeaways

- While the OIC agrees that the Opportunity class is of value, 60% of OIC respondents do not agree that it is straight-forward to understand what can and cannot be included in the class.
- Staff's understanding is mixed as it relates to what can and cannot be included in the Opportunity class.

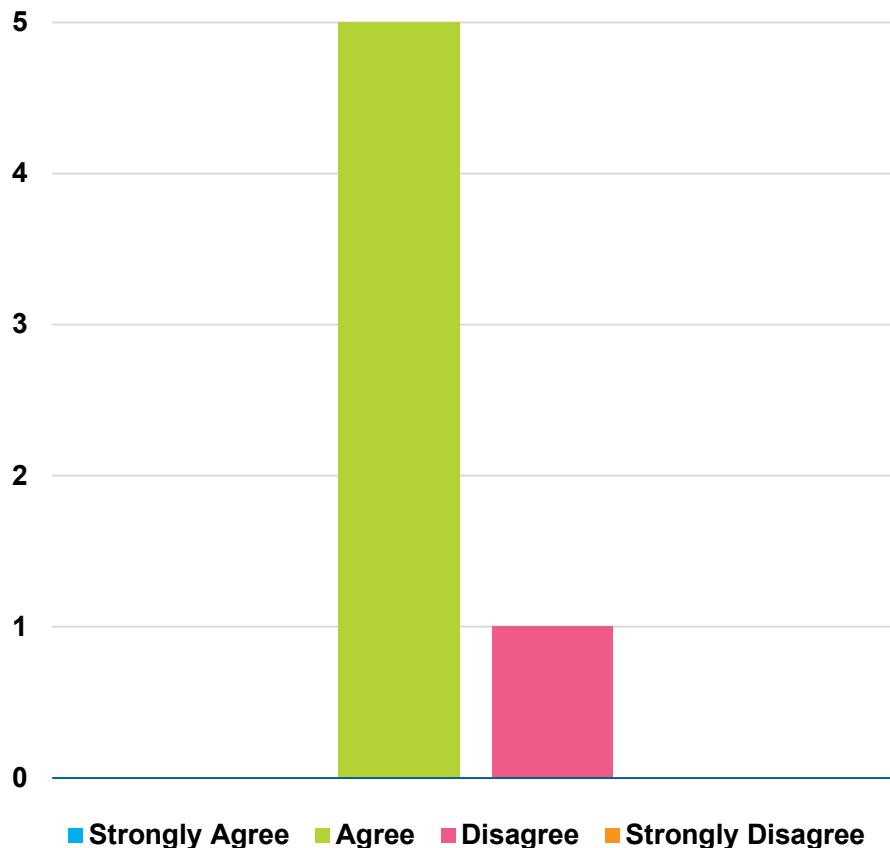
→ Next Steps

- Provide additional education and training around what can and cannot be included in the Opportunity class.

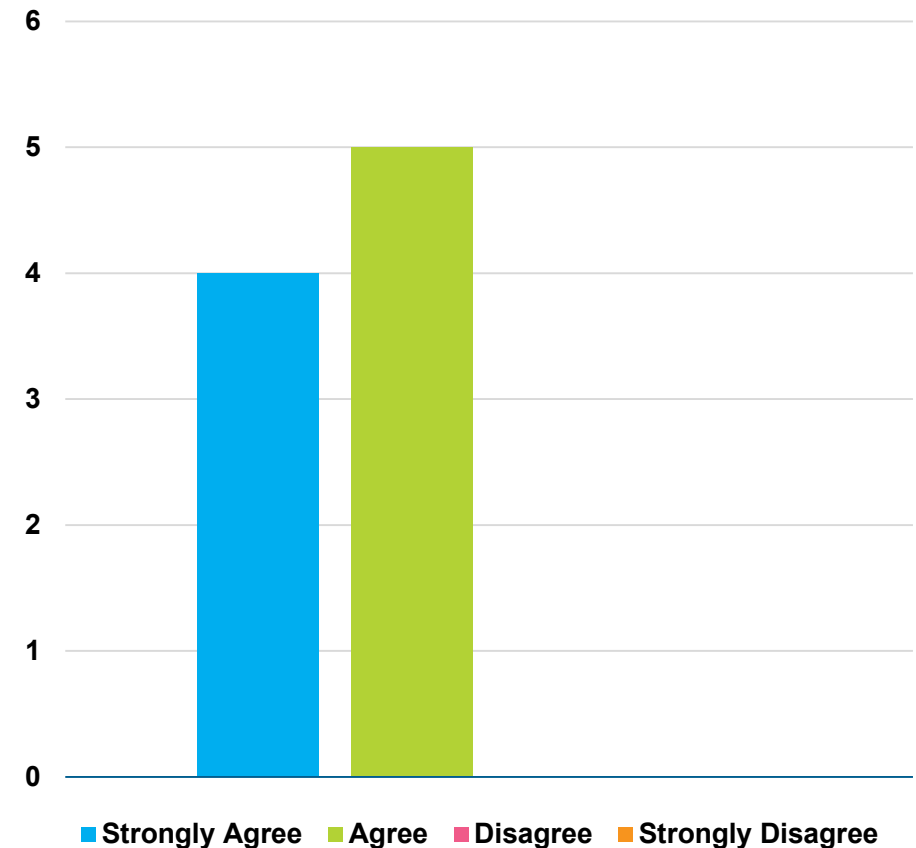
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13. High fee strategies are worthwhile if they produce high net-of-fee returns (e.g., a strategy with a 1% management fee and an 8.5% expected net-of-fee return is preferred to a strategy with a 20 basis point management fee and an 8.3% expected net-of-fee return).

Council



Staff



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13. High fee strategies are worthwhile if they produce high net-of-fee returns (e.g., a strategy with a 1% management fee and an 8.5% expected net-of-fee return is preferred to a strategy with a 20 basis point

→ **Takeaways**

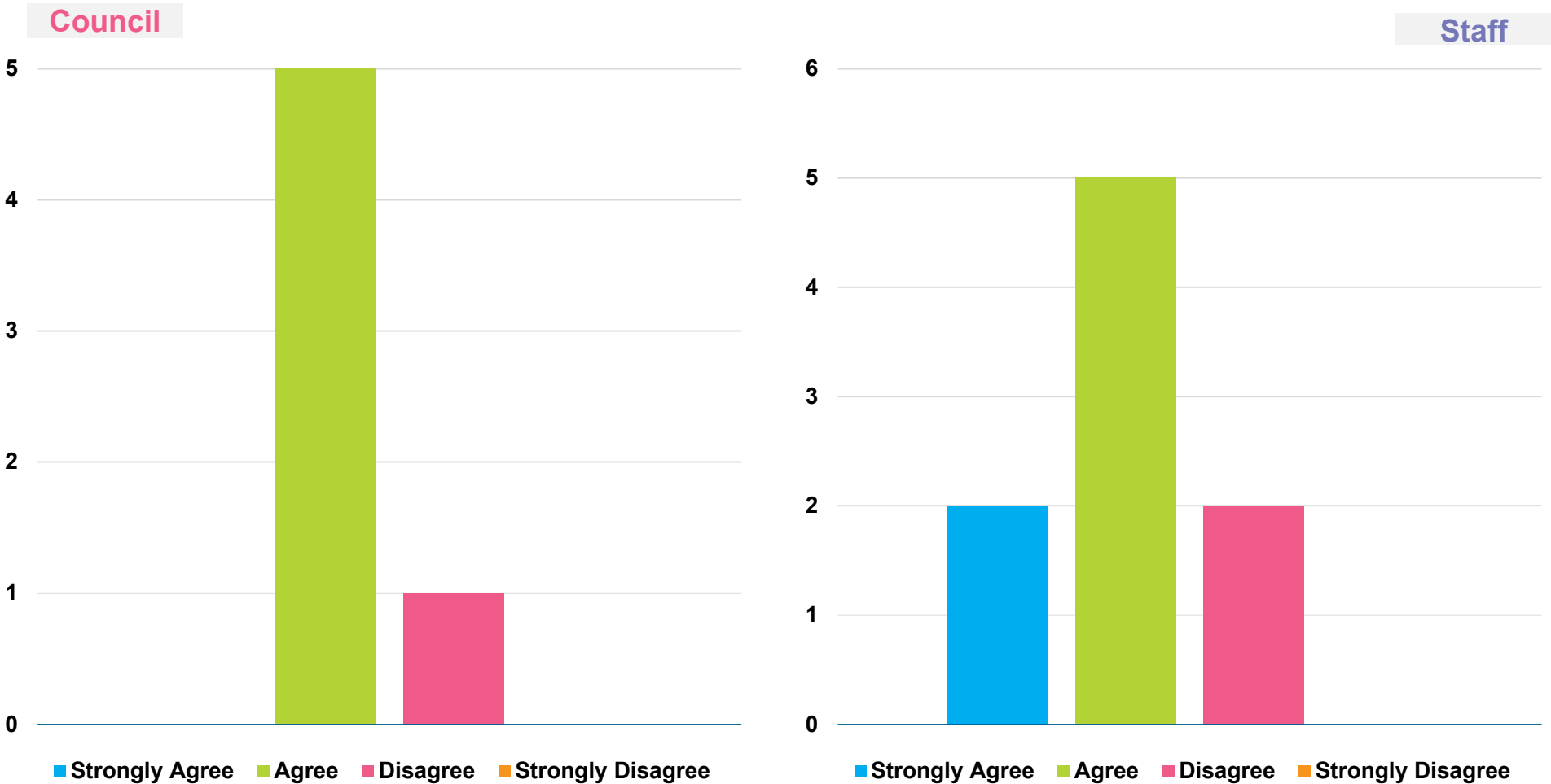
- Over 80% of the OIC believe that net-of-fee risk-adjusted results should be the primary determinant of investment success for a given strategy.
- With an even higher level of conviction, all staff either strongly agree or agree that net-of-fee risk-adjusted results should be the primary determinant of investment success.

→ **Next Steps**

- Continue to include asset classes with higher fees (e.g., private markets) in the asset-liability modeling process, with the overall allocation to such classes determined by overall risk/return objectives and liquidity requirements.

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14. Illiquid strategies typically return more than similar-risk, liquid strategies (e.g., private equity typically returns more than public equity on a risk-adjusted basis).



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14. Illiquid strategies typically return more than similar risk, liquid strategies (e.g., private equity typically returns more than public equity on a risk-adjusted basis).**→ Takeaways**

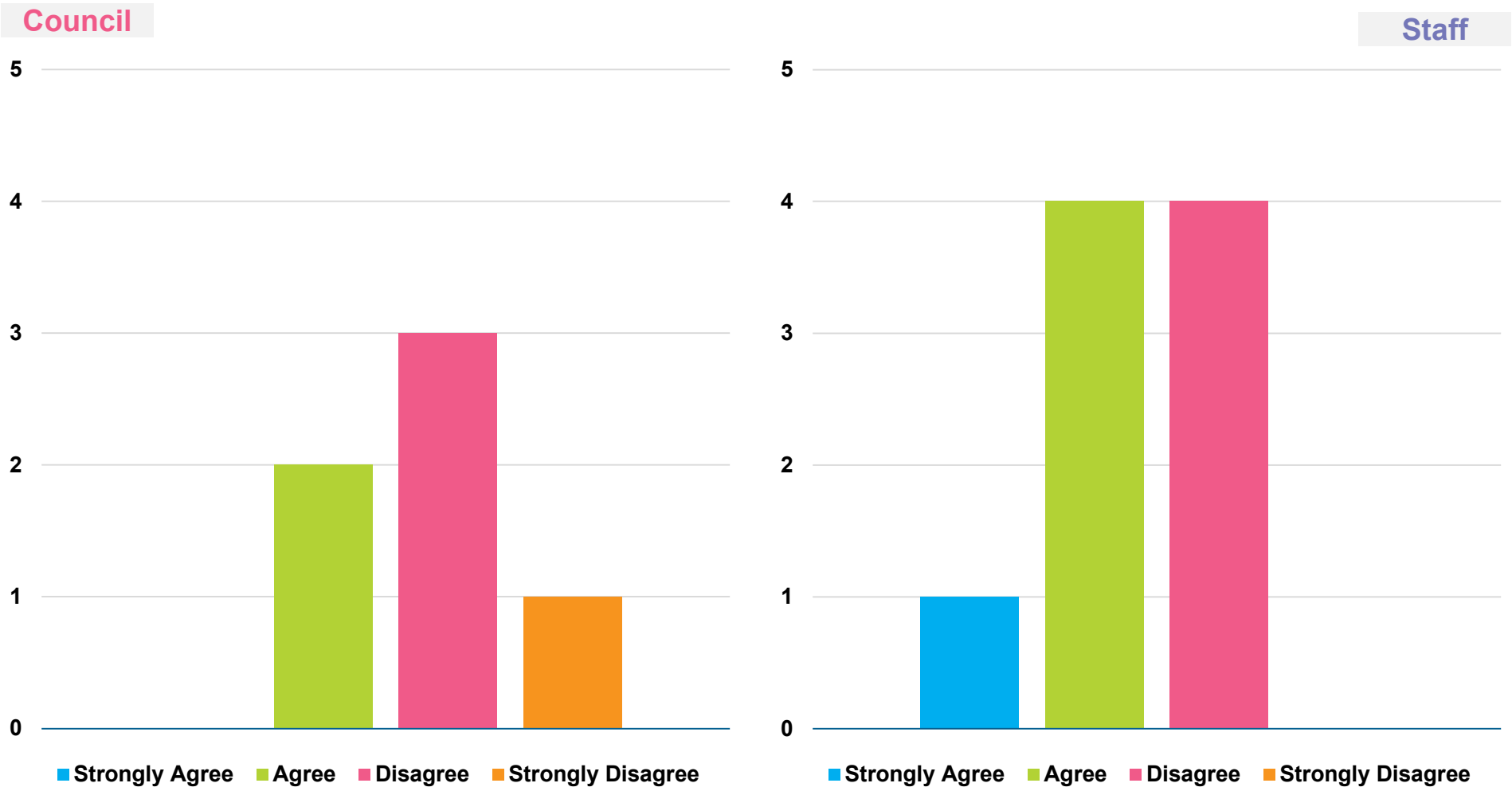
- Both the OIC and Staff believe that illiquid strategies outperform similar risk, liquid strategies on a risk adjusted basis.

→ Next Steps:

- Continue to include illiquid asset classes in the asset-liability modeling process, with the overall allocation to such classes determined by overall risk/return objectives and liquidity requirements.
- When presenting the capital market assumptions, explicitly compare/contrast the expectations for liquid vs. illiquid classes.

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15. Producing a return pattern that is different than peers is important (given the same long-term return).



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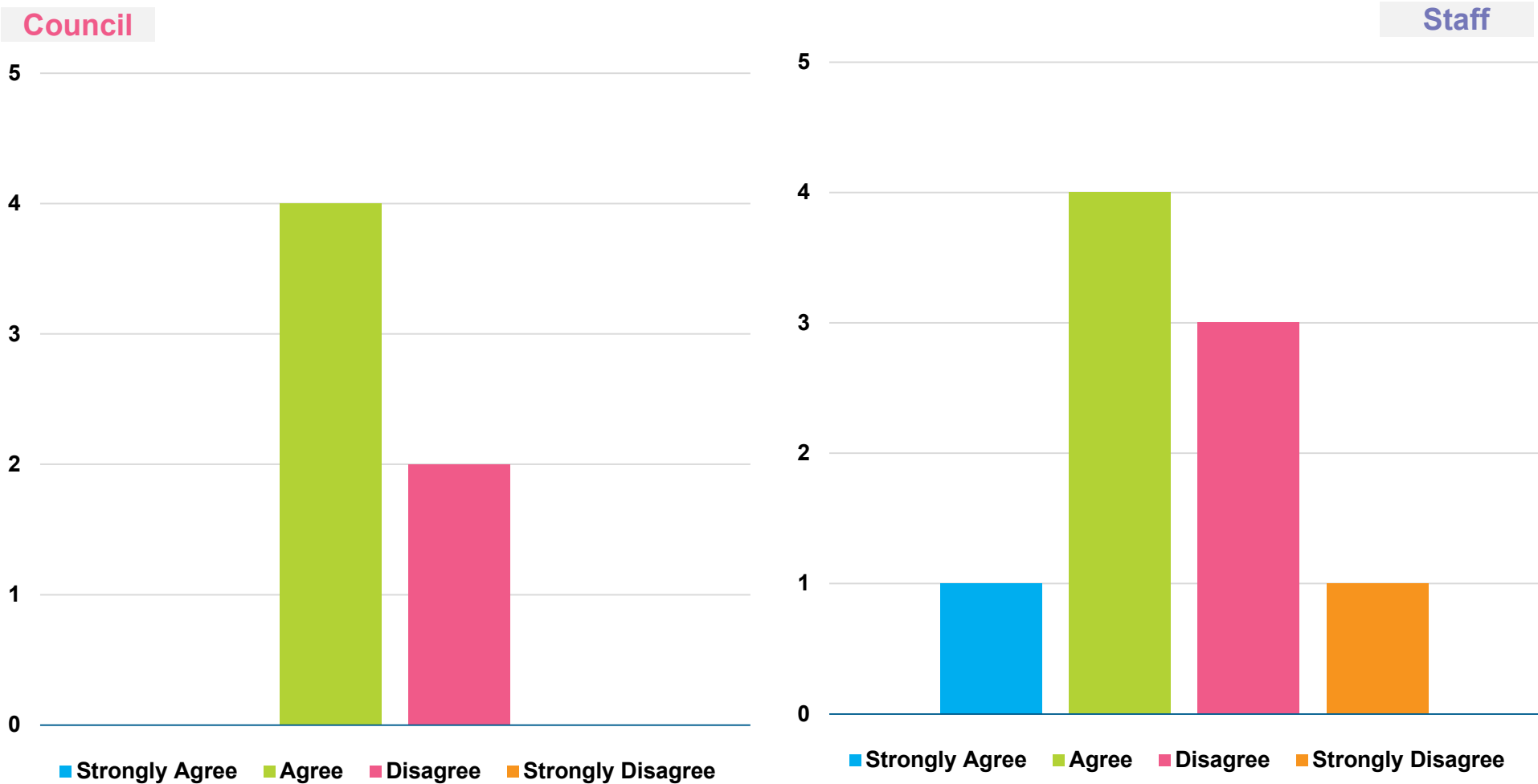
- There is variability within both the OIC and Staff as it relates to how important peer comparisons are.
- Compared to the 2022 survey, there are more responses that indicate “agree” or “strongly agree”, indicating that views on this topic may have changed. This may also be the result of recent peer rankings of OPERF compared to peers.

→ Next Steps

- Discuss the benefits and risks of a differentiated portfolio and ensure that there is alignment across Council and Staff regarding what this actually means and looks like in practice.

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16. Strategies that are designed to hedge equity risk (e.g., insurance-like long volatility or tail risk strategies, etc.) can enhance the risk/return profile of OPERF.



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16. Strategies that are designed to hedge equity risk (e.g., insurance-like long volatility or tail risk strategies, etc.) can enhance the risk/return profile of OPERF.→ **Takeaways**

- Opinions of the OIC are somewhat mixed when it comes to the value of equity hedging strategies.
- Similar to the OIC, the responses from Staff are also mixed.

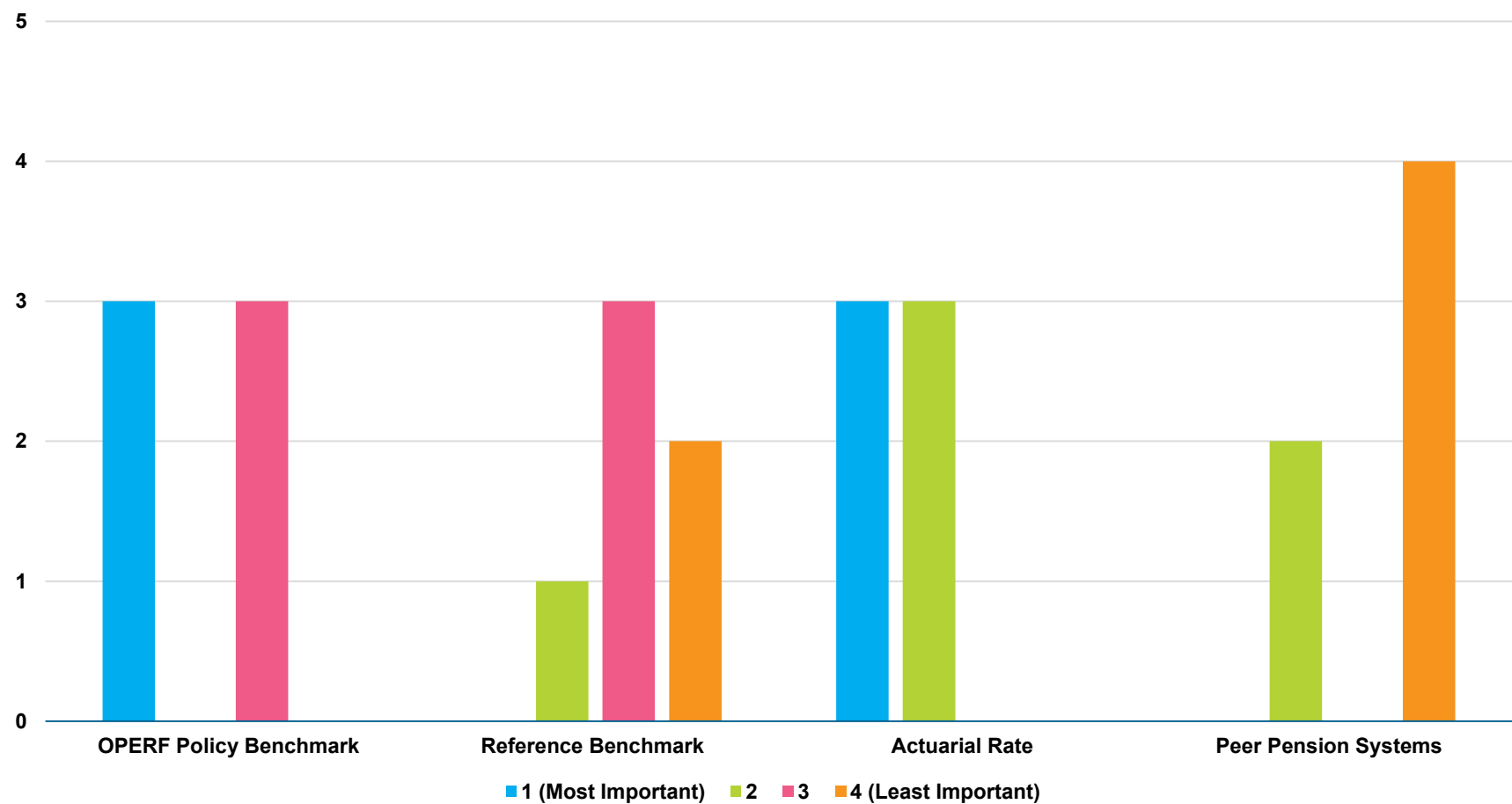
→ **Next Steps**

- No pre-determined inclusion (or exclusion) from portfolio options is indicated.
- There appears to be enough agreement among the OIC, coupled with the overall mixed responses, that education on this topic is prudent and should be conducted.

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17. Rank the following “benchmarks” in order of what you would prefer to not see OPERF “underperform” over a 1-5 year horizon. (1 = the most important benchmark from your perspective)

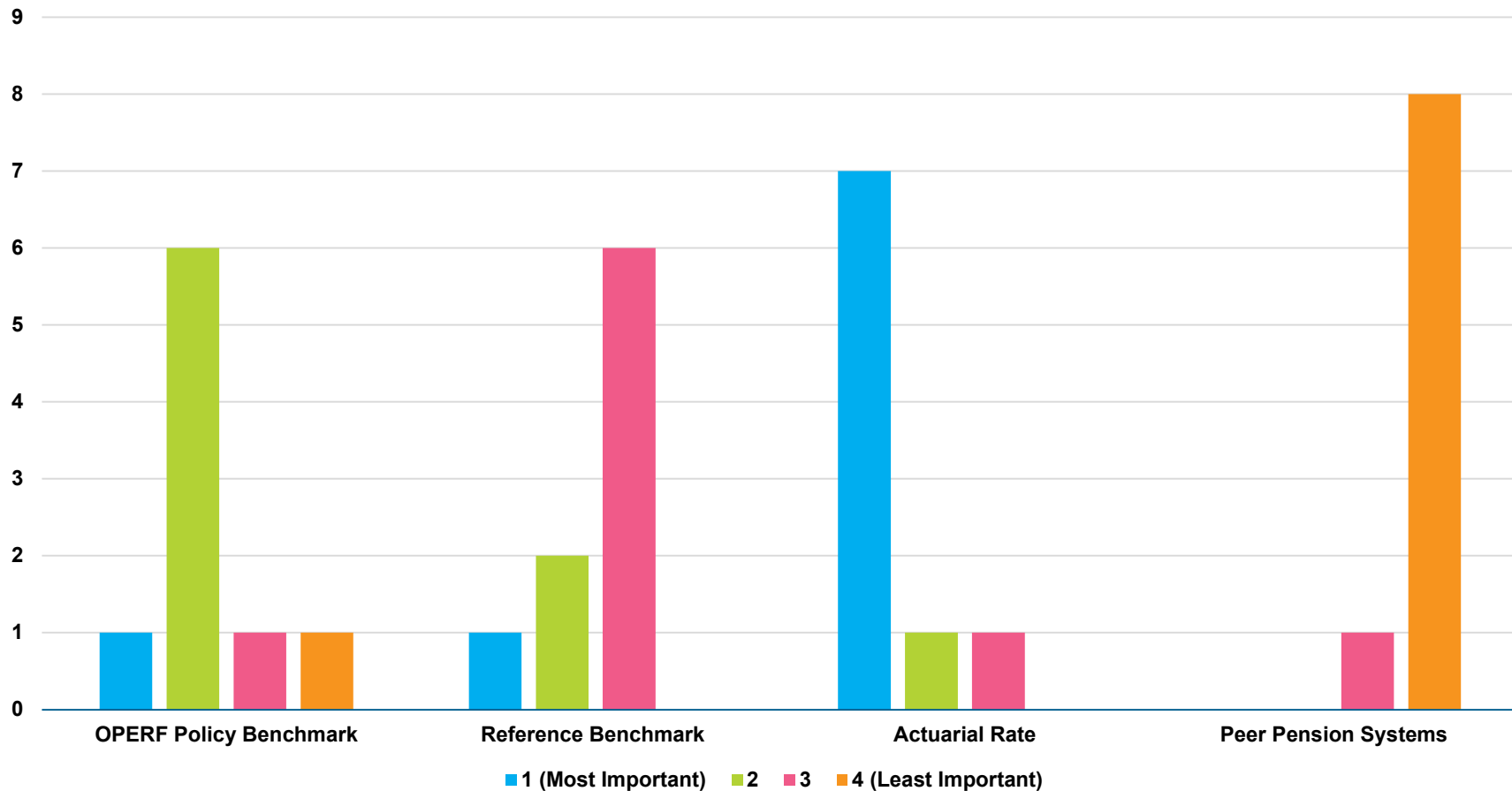
Council



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17. Rank the following “benchmarks” in order of what you would prefer to not see OPERF “underperform” over a 1-5 year horizon. (1 = the most important benchmark from your perspective)

Staff



Asset-Liability Study: Risk and Implementation Survey Results

17. Rank the following “benchmarks” in order of what you would prefer to not see OPERF “underperform” over a 1-5 year horizon. (1 = the most important benchmark from your perspective)

→ **Takeaways**

- Both Council and Staff are in agreement that the Actuarial Rate was the most important benchmark to not underperform.
- The Policy Benchmark is also viewed as a critical point of comparison.
- There was general agreement that Peer comparisons offer the lowest utility.

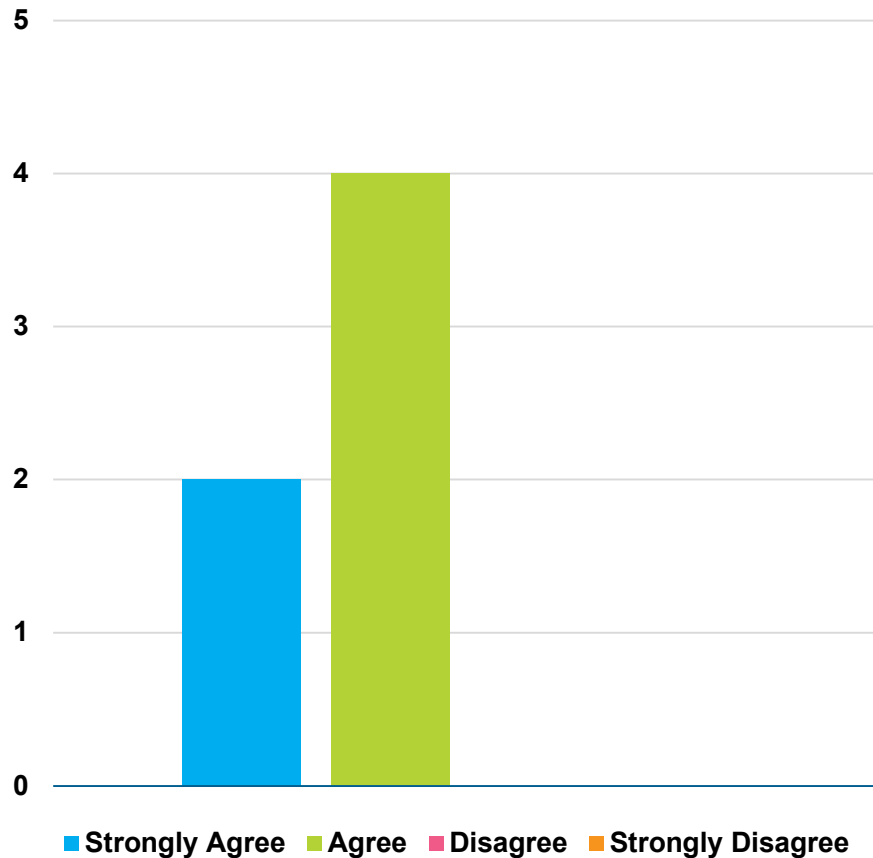
→ **Next Steps**

- Ensure that the Policy Benchmark is constructed to maximize its effectiveness as a point of comparison.

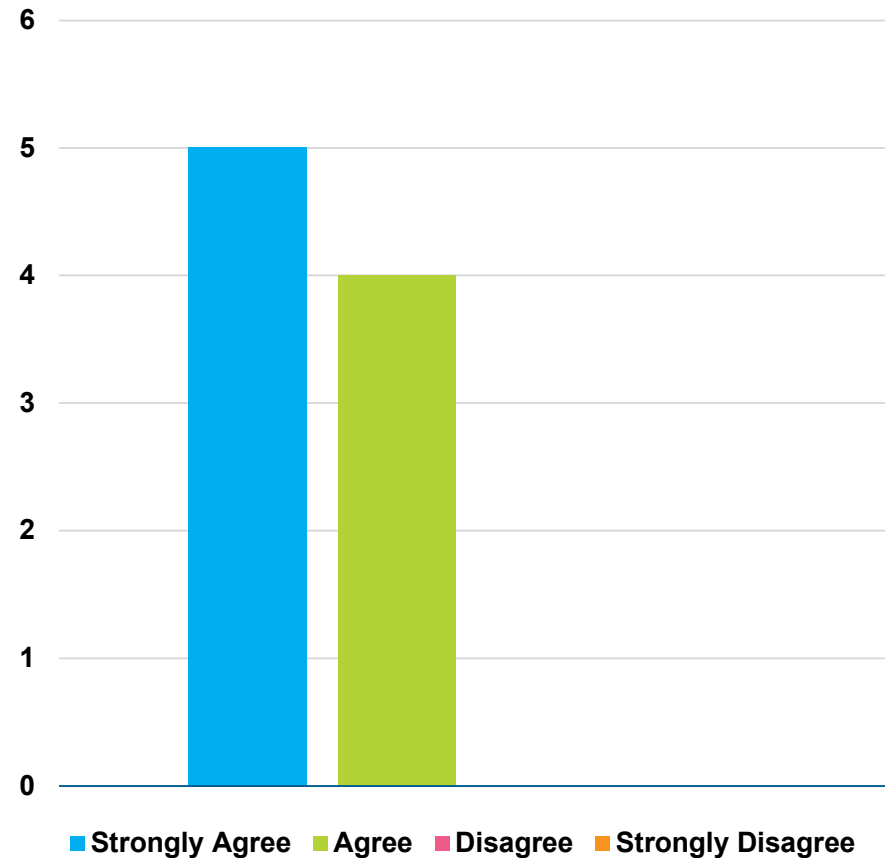
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18. A globally diversified portfolio (e.g., US, non-US developed, and emerging markets) offers a better forward-looking risk-adjusted portfolio than a US-centric portfolio.

Council



Staff



Asset-Liability Study: Risk and Implementation Survey Results

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→ **Takeaways**

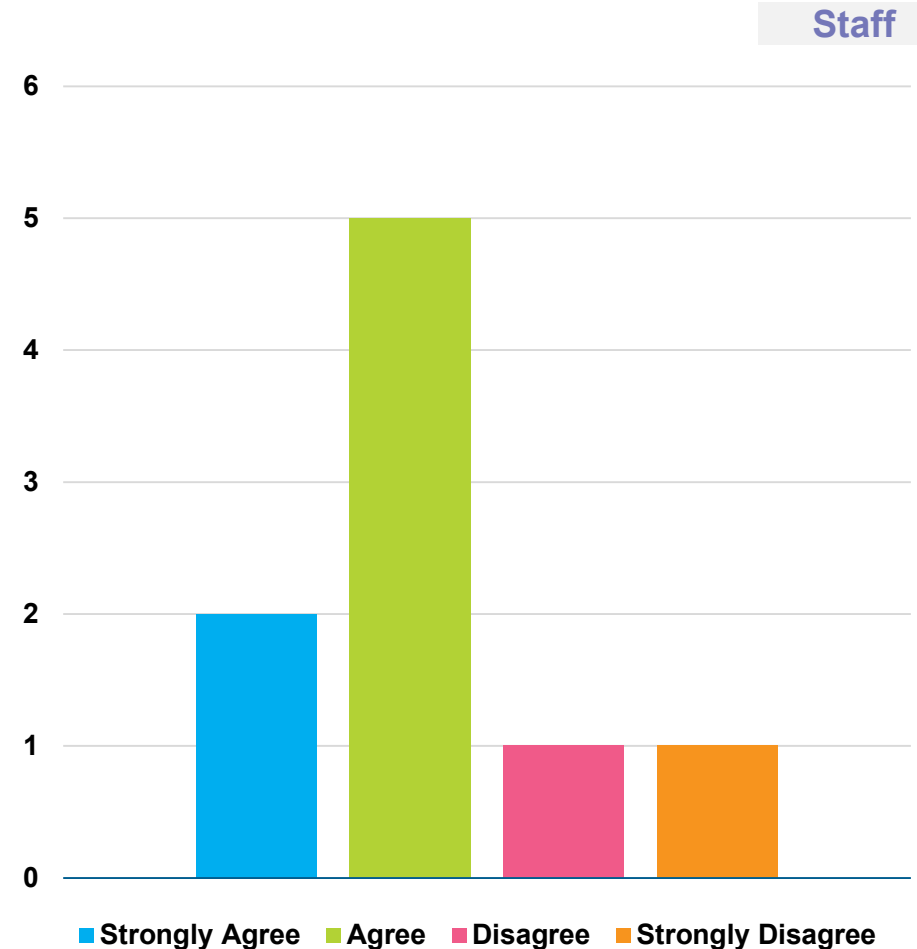
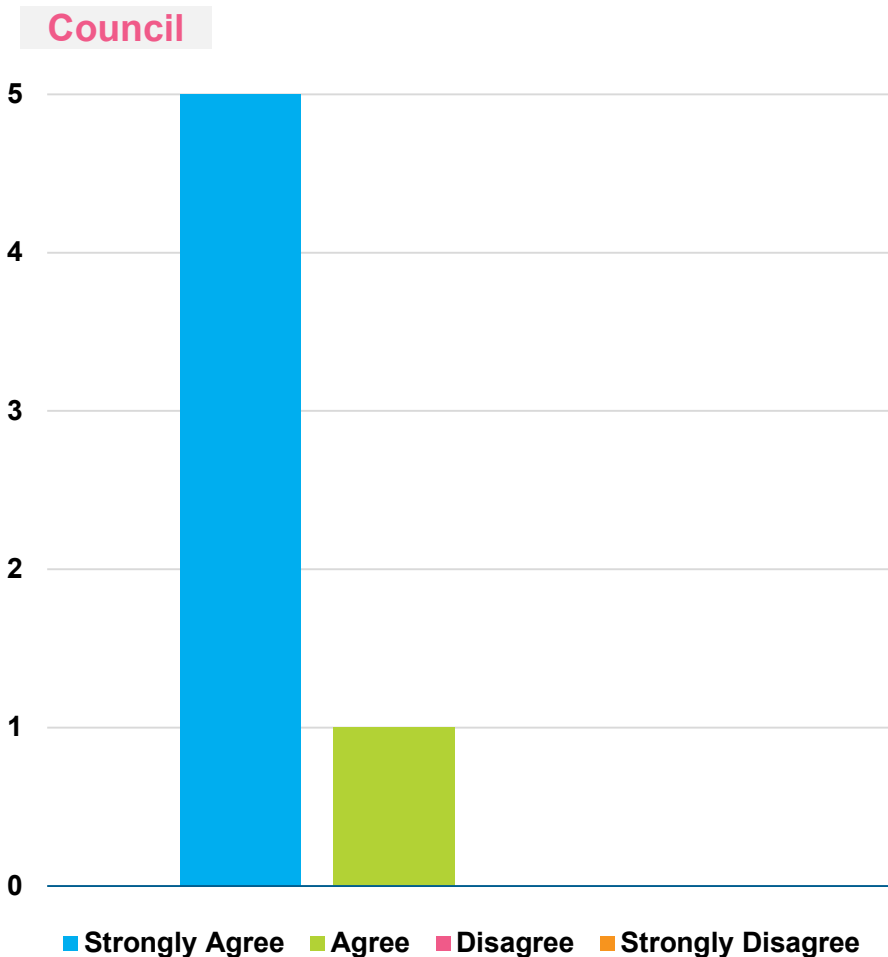
- Both Council and Staff agree that a globally diversified portfolio is more beneficial than a US-centric portfolio

→ **Next Steps**

- Approach asset classes through a global lens to ensure regional diversification.

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19. Fixed Income is a broad market category with varying levels of different risks (e.g., interest rates, credit, liquidity, etc.). It would be useful in overseeing the OPERF portfolio for the Fixed Income category to be more segmented at the Asset Allocation level.



Asset-Liability Study: Risk and Implementation Survey Results

19. Fixed Income is a broad market category with varying levels of different risks (e.g., interest rates, credit, liquidity, etc.). It would be useful in overseeing the OPERF portfolio for the Fixed Income category to be more segmented at the Asset Allocation level.

→ Takeaways

- Over 80% of the OIC Strongly Agreed, and 100% were in agreement that a more segmented approach to Fixed Income management would be beneficial.
- Most Staff at least agreed that a more segmented approach would be beneficial.

→ Next Steps

- Segment the Fixed Income category within the asset-liability study.

Asset-Liability Study: Risk and Implementation Survey Results

Conclusion

- These survey results serve as a foundational guide for the asset-liability modeling process. The preferences and viewpoints of the OIC will be built into the model and its corresponding output.
- The results support the current trajectory of the OIC/OPERF. There is nothing in the results that suggests a material deviation from the current strategic allocation and risk posture is desired.
- Primary objectives:
 - Maintain consistent progress on funded ratio.
 - Avoid major drawdowns and focus on corresponding implications of negative net cash-flow.
- As it relates to existing and potential classes, the following apply:
 - Continue to include illiquid strategies and examine all strategies based on net-of-fee results.
 - Maintain a global orientation within asset classes, particularly as it relates to public equity.
 - While the Diversifying Strategies class is viewed as valuable, there needs to be further education as to what can and cannot be included in the class. Education on equity hedging strategies will also be included.
 - Segment the Fixed Income asset class during the asset-liability study and corresponding asset allocation options.

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