Attachment 2: Low Carbon Index Modeling Assumptions

Step 4: Integrate ACWI Low Carbon Target Allocation and Climate Scenarios into ALM Framework to Model Impacts on Risk, Return and Funding Plan

Model assumptions:

As discussed in the Background section, in order to integrate climate scenarios into the ALM modeling framework, staff had to make certain assumptions around how the ACWI LCT index would likely perform under each climate scenario. While climate modeling has advanced significantly over the past years, the level of granularity staff required from this analysis is not currently available.

Staff is assuming that, on average, the ACWI LCT index benefits in an orderly transition and underperforms in a more disorderly transition. The timing of risk and return, costs and benefits are qualitative and driven by staff judgment about how and when the market might react to a particular climate scenario. The magnitudes of risk and return assumptions were driven by a mix of qualitative judgment about the nature of the scenario and existing statistical models of risk.

While staff is confident in applying a thoughtful analytical logic to this process, it is important to recognize that it is the first-time staff has conducted this type of analysis. While staff believes these assumptions are reasonable considering all available information, there is no guarantee that the timing, duration, and level of performance will follow these assumptions.

Table 3: Summary of Climate Scenario Assumptions

Climate Scenario	Active Return Benefits / Costs vs Traditional Benchmark	Active Risk vs Traditional Benchmark
Net Zero 2050 (Orderly)	LCT assumed to have higher returns in early years that narrow over time	Level of active risk is assumed to be modest and stable over long-term
Below 2 (Orderly)	LCT assumed to have steady benefits in early years, followed by normalization over time	Level of active risk is assumed to be modest and stable over long-term
Divergent Net Zero (Disorderly)	LCT assumed to provide modest, steady benefits over time	Level of active risk assumed to be higher over time due to divergent transition risk
Delayed Transition (Disorderly)	LCT assumed to have lower returns in early years and much higher returns in later years	Level of active risk assumed to be modest at first, with a substantial spike in active risk from delayed transition.
Nationally Determined Contribution (NDCs) (Hot House)	LCT assumed to have slightly lower returns in long-term due to higher active risk	Level of active risk assumed to be higher over time
Current Policies (Hot House)	LCT assumed to have lower returns over long-term	Level of active risk assumed to be high and grows over time