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Bond Portfolio Builder: Add Stability to Your Investment Mix

Bonds are not just defensive filler. A properly structured bond allocation—laddered across 1 to 5 years, diversified across Treasuries, TIPS, investment-grade corporates, and municipals—lowers portfolio volatility, generates predictable income, and gives you an asset you can sell or hold to maturity during equity drawdowns. This guide turns that abstract objective into a concrete system: specific allocation percentages, a five-rung ladder with reinvestment rules, tax placement decisions by bracket, and the exact tools to buy Treasuries directly or screen for corporates and municipals. If bonds currently represent a random pile of whatever came with your target-date fund, this builder replaces that randomness with a plan you can defend.

1. Foundation

A bond portfolio has three simultaneous jobs: dampen portfolio volatility during equity downturns, generate income that compounds or covers spending needs, and protect against inflation at least partially. The challenge is that maximizing yield, minimizing duration risk, and maintaining liquidity are often in tension. A 10-year Treasury maximizes coupon income today but creates serious price sensitivity to rate changes—every 1% rate increase cuts a 10-year bond's price by roughly 8 to 9%. A money-market fund offers zero duration risk but zero real yield in most environments. The bond ladder solves this by spreading maturities across 1 to 5 years so you have near-term liquidity at the short end, lock-in yield at the long end, and systematic reinvestment at every step.

The starting allocation framework for a taxable investor in the 22% bracket or higher is: Treasuries 40%, TIPS 20%, investment-grade corporate bonds 30%, and municipal bonds 10%. For investors in the 32%+ bracket, the municipal weighting often grows to 20 to 25% because the tax-equivalent yield on munis can exceed taxable yields for high earners. Tax-equivalent yield = $\text{muni yield} \div (1 - \text{marginal tax rate})$; a 3.8% muni yield is equivalent to 5.6% taxable at the 32% bracket. For accounts inside a 401(k) or traditional

IRA, the municipal advantage disappears—hold munis only in taxable accounts. TIPS carry a phantom income tax problem (you pay taxes on inflation adjustments before receiving cash), so TIPS belong in tax-advantaged accounts when possible. Treasuries and investment-grade corporates work in either location.

Duration defines your interest-rate risk. Short-term bonds mature in 1 to 3 years and typically carry a modified duration of 0.9 to 2.7; a 1% rate increase would reduce their price by roughly 1 to 3%. Intermediate bonds mature in 3 to 7 years with duration of 2.8 to 6; the same 1% rate increase would cut price by 3 to 6%. The five-rung ladder spans both zones, but the average duration stays in the short-to-intermediate range—far more manageable than a long-bond fund that can fall 15 to 20% in a rising-rate year.

Bond allocation worksheet by account type and tax bracket that lets you translate the 40/20/30/10 base model into specific dollar amounts across your taxable brokerage, traditional IRA, and Roth IRA, with muni placement rules by income level.

Five-rung ladder construction guide covering 1-year, 2-year, 3-year, 4-year, and 5-year maturities with target allocation per rung, reinvestment instructions when each rung matures, and the TreasuryDirect.gov auction calendar for non-brokerage purchases.

Individual bond versus bond fund comparison matrix covering credit diversification, price transparency, reinvestment control, ladder precision, liquidity at sale, and effort required—so you can decide whether to buy individual bonds, ETFs like BND or VCSH, or a mix.

2. Step-by-Step System

1

Set your total bond allocation and target duration range

Decide what percentage of your overall portfolio is fixed income before choosing any specific bonds. A common rule of thumb is your age in bonds, meaning a 40-year-old holds 40% fixed income, but most investors accumulating wealth before retirement target 20 to 40% bonds depending on risk tolerance and time horizon. Once you have a dollar figure, choose your target duration range. For investors 5 to 15 years from retirement or goals, a short-to-intermediate duration of 2 to 5 years is a reasonable middle ground—it captures meaningful yield without locking you into maximum rate sensitivity. Write down your total bond allocation in dollars and your acceptable duration range before choosing any securities. That constraint eliminates 80% of options immediately and focuses the rest of the work.

2

Build the five-rung ladder with equal or weighted rungs

Divide the bond allocation across five maturities: 1-year, 2-year, 3-year, 4-year, and 5-year. An equal-weight ladder puts 20% in each rung. A front-loaded ladder (25% in year 1, 25% in year 2, 20% in year 3, 15% in year 4, 15% in year 5) increases near-term liquidity if you expect cash needs or rising rates. A back-loaded ladder does the opposite. For Treasuries, use [TreasuryDirect.gov](https://www.treasurydirect.gov) to buy at auction with no fees—4-week, 13-week, 26-week, and 52-week T-bills, plus 2-year notes. For the 3-year, 4-year, and 5-year rungs, Fidelity's bond screener (Fixed Income, then filter by maturity date, issuer type, and minimum credit rating) lets you compare Treasuries, agencies, and investment-grade corporates side by side. When a rung matures, reinvest the proceeds into a new 5-year bond to keep the ladder intact and lock in whatever rate is available at that time. This rolling reinvestment is the core mechanics of a ladder—each year, your shortest rung matures and you extend to 5 years again.

3

Place bond types by account for maximum tax efficiency

The account where you hold each bond type matters as much as which bond you buy. TIPS generate phantom income (inflation accruals taxed annually even though not received until maturity), so hold TIPS inside a traditional IRA or 401(k) where the tax liability is deferred. Municipal bonds are federally tax-exempt, making them most valuable in taxable brokerage accounts for investors in the 22% bracket or higher. For a 32% federal taxpayer, a 3.5% muni yield equals a 5.15% taxable yield—putting munis inside an IRA wastes that advantage entirely. Treasuries are exempt from state and local income tax, which adds 3 to 13% of extra value depending on your state rate. Investment-grade corporate bonds generate fully taxable interest income and are the most interchangeable—hold them wherever you have space. The priority order: TIPS → tax-advantaged, munis → taxable only, Treasuries → taxable for state-tax savings, corporates → wherever space remains.

4

Screen for corporate and municipal bonds using Fidelity's bond screener

Fidelity's fixed income screener ([fidelity.com](https://www.fidelity.com) → News & Research → Fixed Income) lets you filter by maturity range, credit rating, coupon type, and minimum face value. For investment-grade corporate bonds, set the credit rating filter to BBB or higher (Standard & Poor's) or Baa or higher (Moody's). Filter by maturity date to match your target rung—for example, 3-year rungs would filter to bonds maturing 30 to 40 months out. Compare the yield-to-maturity column, not the coupon. Yield to maturity is the true annualized return if you hold to maturity, accounting for the price premium or discount. For municipal bonds, also check the tax-equivalent yield column, which Fidelity calculates automatically when you set your tax rate. A 3.2% AAA-rated muni maturing in 3 years may show a 4.7% tax-equivalent yield for a 32% bracket investor—that often beats the comparable corporate. Always verify credit rating from two agencies and check the issuer's most recent financial statements for revenue bonds.

5

Handle TIPS allocation and I-bond limits separately

TIPS (Treasury Inflation-Protected Securities) adjust their principal for changes in the Consumer Price Index. If inflation runs at 4%, a \$10,000 TIPS position adjusts to \$10,400 principal; your coupon is then paid on the higher base. The catch: that \$400 adjustment is taxable as ordinary income in the year it accrues, even though you receive it as cash only at maturity or sale—hence the phrase "phantom income." This makes TIPS nearly unsuitable for taxable accounts unless you have a specific reason. For IRA placement, TIPS are available directly through TreasuryDirect or as the ETF SCHP (Schwab) or TIPS (iShares), with expense ratios around 0.03 to 0.19%. I-bonds are different: they are purchased directly at TreasuryDirect.gov, capped at \$10,000 per person per year (plus \$5,000 via tax refund), carry a 1-year lockup and a 3-month interest penalty if redeemed before 5 years, and compound tax-deferred until redemption. I-bonds belong in taxable accounts because the tax deferral is their advantage. Do not put TIPS and I-bonds in the same mental bucket—they have different purchase mechanics, tax treatment, and liquidity profiles.

6

Set rebalancing triggers and reinvestment rules in writing

The two decisions that break most bond portfolios are panic-selling during rate increases and failing to reinvest maturities systematically. Write the following rules before you start: (1) When a rung matures, reinvest the full proceeds into a new 5-year bond within 10 business days regardless of the current rate environment—this is the ladder discipline that prevents market-timing on the fixed-income side. (2) If the bond allocation drifts more than 5 percentage points from target (e.g., bonds should be 30% but are now 24% because equities ran up), rebalance annually in January using new contributions or by trimming equities. (3) If rates rise more than 1.5% in a calendar year, do not sell existing bonds at a loss to chase the new yield unless you are harvesting a tax loss—just let the ladder roll forward and enjoy the higher rate at the next maturity. The math of panic-selling bonds in a rising-rate environment almost never works out; a 2-year bond that you sell at a 3% loss to buy a bond yielding 0.5% more needs 6 years to break even.

3. Key Worksheets & Checklists

These worksheets convert allocation theory into specific bond purchases with maturity dates, dollar amounts, and account placement decisions. Fill in the setup table with your real numbers before you buy anything; the checklist keeps you from skipping the tax-placement step that quietly destroys a third of the value of munis held in the wrong account.

1. Ladder Setup Worksheet

Total bond allocation (\$)	Your target bond dollar amount: portfolio value × bond percentage. Example: \$200,000 × 30% = \$60,000 total bond allocation.
Rung 1 — 1-year (20%)	\$12,000 in a 52-week T-bill via TreasuryDirect or 1-year Treasury note via brokerage. Note maturity date and reinvestment trigger.
Rung 2 — 2-year (20%)	\$12,000 in a 2-year Treasury note. Bought at auction or secondary market; record yield-to-maturity and settlement date.
Rung 3 — 3-year (20%)	\$12,000 split between an investment-grade corporate and a muni bond for taxable accounts, or full Treasury/TIPS in an IRA.
Rung 4 — 4-year (20%)	\$12,000 in an IG corporate or Treasury note. Use Fidelity screener; filter by maturity 44-50 months out, BBB+ or higher rating.
Rung 5 — 5-year (20%)	\$12,000 in a 5-year Treasury or TIPS (TIPS in IRA only). Record exact maturity date and yield; this rung sets your longest-duration position.
Reinvestment rule	When Rung 1 matures, reinvest the full proceeds into a new 5-year bond within 10 business days. Repeat each year.

2. Execution Checklist

- Bond allocation dollar amount calculated and written down before opening any screener or account.
- Tax bracket confirmed (22%, 24%, 32%, 35%, or 37%) so muni tax-equivalent yield can be calculated accurately.
- TIPS earmarked for IRA or 401(k) only; no TIPS purchased in taxable brokerage until IRA space is verified full.
- Municipal bonds earmarked for taxable brokerage only; muni tax-equivalent yield compared to comparable Treasury yield to confirm the math works at your bracket.
- Five rung maturities selected with specific maturity dates noted (not just "about 3 years").
- Each bond's yield-to-maturity, credit rating (two agencies for corporates), and face value recorded in one spreadsheet row.
- Reinvestment rule written down with a calendar reminder set for 2 weeks before each maturity date.
- Duration of entire ladder calculated as the weighted average of individual bond durations; confirm it falls within your target range of 2 to 5 years.

3. 30-Day Ladder Build Tracker

Week	Action	Evidence Complete
Week 1	Calculate total allocation, confirm bracket, open TreasuryDirect account if needed, add Fidelity bond screener to bookmarks	Dollar amount written, bracket confirmed, TreasuryDirect login created
Week 2	Purchase Rung 1 (1-year T-bill) and Rung 5 (5-year Treasury or TIPS). These anchor the ladder at both ends.	Two positions confirmed in account; maturity dates and yields recorded
Week 3	Purchase Rungs 2, 3, and 4 using brokerage screener. For taxable accounts, compare muni tax-equivalent yield at your bracket before buying corporates for Rung 3.	All 5 rungs purchased; total allocation within 2% of target
Week 4	Set calendar reminders for each maturity. Write reinvestment rule. Calculate weighted average duration of complete ladder.	Five calendar reminders set; written reinvestment policy saved; duration confirmed within target range

4. Common Mistakes

Holding municipal bonds inside a traditional IRA

Muni interest is federally tax-exempt, but that exemption has zero value inside a tax-deferred account where all withdrawals are taxed as ordinary income anyway. Putting munis in an IRA wastes the tax exemption entirely while typically accepting a lower pre-tax yield than comparable Treasuries or corporates would offer in the same space.

Selling bonds at a loss when rates rise

A 3-year bond that dropped 4% in price because rates rose 1.5% still matures at full face value in 3 years. Selling it locks in the loss permanently. Unless you are harvesting the loss for a specific tax benefit—selling to buy a similar but not substantially identical bond to capture the paper loss against capital gains—holding to maturity is almost always the right answer.

Buying a long-duration bond fund without understanding price sensitivity

The iShares 20+ Year Treasury Bond ETF (TLT) has a duration around 16. That means a 1% rate increase costs roughly 16% in price. Most investors who bought TLT for safety between 2020 and 2022 were shocked to lose 35% in value while holding a "safe" Treasury fund. Duration matters more than the label on the tin.

Using yield-to-call instead of yield-to-maturity for callable bonds

Many corporate and municipal bonds include a call provision that lets the issuer repay early—usually when rates fall and they can refinance cheaper. If you buy a 5-year corporate at 5.2% and it gets called in year 2, your actual yield is the yield-to-call, not the 5.2% you thought you were locking in. Always check whether a bond is callable and compare both yield-to-maturity and yield-to-worst before buying.

5. Next Steps

Open TreasuryDirect.gov if you do not already have an account—it takes 10 minutes and enables zero-fee direct Treasury purchases at every auction. Set Fidelity's bond screener as a bookmark and run it quarterly to compare current yields against your existing

positions. Once the ladder is running, review it once per year in January: check that allocations are on target, reinvest any matured rungs, and recalculate weighted average duration. If your bracket changes (promotion, retirement, Roth conversion strategy), revisit the muni weighting calculation. Resources worth bookmarking: TreasuryDirect.gov for auctions, EMMA (emma.msrb.org) for municipal bond disclosures, FINRA's bond screener at finra-markets.morningstar.com, and the Federal Reserve's H.15 release for current Treasury yields.

- Open TreasuryDirect.gov account and verify bank link before purchasing first T-bill or note.
- Calculate muni tax-equivalent yield at your actual bracket before any muni purchase.
- Confirm TIPS are placed inside a tax-advantaged account, not a taxable brokerage.
- Set calendar reminders for all five maturity dates with a note to reinvest into a new 5-year bond.
- Run the full ladder duration calculation once per year to confirm it stays within your target range.

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