**CRE Proforma Notes**

The light green shaded cells are for user input. The other areas are based on calculations from these cells. You may need to consult your textbook for how proformas are constructed.

**Top Section**
- Cell D1 has an IF statement based on cell C3 on ConstrFinance to display either the words “Purchased Real Estate” or “Development Project”
- Cells B7-B10 use an IF statement. If cell C3 on the ConstrFinance tab is 1, then the purchase data is linked here. For a Development Project, the land improvements are the cost of landscaping and the half the cost of the sewer and water and paving and curbing costs. The purchase price is computed as the cost of the project (ConstrFinance tab) plus the developer cost of carry on the equity portion. The acquisition costs are already in the development costs so not value here. The land cost is the purchase of the land plus the improvements costs that cannot be depreciated.
- The Initial long term building basis is the purchase price minus the land value minus the land improvement basis minus the 7yr basis. The 7yr basis is the purchase price plus any acquisition costs minus land costs minus the land improvements value multiplied by the 7-yr building improvement percentage.

**Before and After Tax Cash Flow by Year.**
- The Operations Cash Flow values are taken from computations noted below and presented as a summary here. First compute values below, and then link them to this summary area.
- The Year 0 Capital Cash Flow can be computed as: Purchase Price + Acquisition Cost + Points (Dollar Amount) – Mortgage Amount. The dollar amount of the points is the Mortgage Amount times the Points. Link this cell to the After Tax portion as it is the same.
- The Year 10 Capital Cash Flow (i.e. equity cash flow) is computed near the bottom of the spreadsheet and then linked to the appropriate cell.
- After you have done the linking you can compute the Total CF which is the sum of the Operations and Capital Figures.
- For the IRR calculations, use the IRR function on the Total CF.
- For the NPV, use the NPV function. Note: The NPV function in Excel assumes the first cash is one period from now, so use the NPV for CF Year 1-10, and then subtract off the initial CF. The rate for discounting is from the input cell labeled “Equity Hurdle Rate”.
- Ratio analysis presents the common ratios used to evaluate CRE. The unlevered return is the also called the cap rate, though one usually talks about a cap rate for the year the building is purchased.

**Cash Flow From Operations.**
- The figures for computing the NOI are taken from the LeaseDetail tab.
- Taxes are computed in the next section.
- Before Tax Cash Flow is the NOI minus the Mortgage Payment. If you have no mortgage (ie. LTV=0), then this will be the NOI. Link this cell to the Operations line in the Before Tax Cash Flow by Year area.
- Taxes are the taxes due from this investment. Link this to the cell below where it is computed.
- After Tax Cash Flow is the Before Tax Cash Flow minus the Taxes. Link this cell to the Operations Line in the After Tax Cash Flow by Year area.
Income Taxes From Operations

- End of Year Loan Balance is calculated to aid in the computation of the amount paid to interest. It is the present value of the remaining payments. Use the PV function as done above to get the mortgage balance, with nper as the number of periods remaining on the loan. So nper = 12 * ([cell near top with Term] - [cell above with current year])
- NOI is linked from where it is calculated above
- Capital reserves are taken from the LeaseDetail tab
- Interest is the interest paid that year. One way to compute is 12 times the monthly payment minus (last years loan balance – this year’s loan balance). In words, interest is the total payments minus the principal reduction
- Amortized finance cost is the dollar amount paid in points divided by the term of the loan. Any finance cost not written off during the term of the loan can be written off when the loan is repaid, so the figure for the final year is the dollar amount of the points minus the sum of the charges taken to date. For a ten year term, it’s the same as any other year
- Depreciation is computed relative to the basis for each component and the above so link to the appropriate cells. For the first and last year you should use the “mid month rule” and only take 11.5/12 of the annual depreciation.
- Taxes due is the Marginal Tax Bracket times the Taxable Income. Link to this cell at the appropriate place above in Cash Flow From Operations

Cash Flow From Resale

- Estimated Sales Price is the NOI in year 11 divided by the Going Out Cap Rate
- Sales Expense is the Estimate Sales Price times the Selling Expense
- Net Sales Price is the Estimated Sales Price minus the Selling Expense. Link this value to the appropriate cell to the right.
- Mortgage Payoff is the balance shown above for year 10
- Before Tax Equity Reversion is the Net Sales Price minus the Mortgage Payoff. This is the Before Tax CF from Capital for Year 10, so link this cell to the appropriate cell above
- Taxes on Sale is computed else where (described below). Link from the appropriate cell.
- After Tax Equity Reversion is the Before Tax Equity Reversion minus the Taxes on Sale. Link this cell to the appropriate cell above for After tax Capital CF above.

Gain on Sale

- Net Sales prices was computed above. Link this cell to that figure.
- Adjusted Basis is the Purchase Price plus Acquisition Costs plus sum of the capital improvements minus the sum of the depreciation from Year 1 to 10 (called the accumulated depreciation) for each of the three lines of depreciation.
- Gain on Sale is the Net Sales Price minus the Adjusted Basis
- Depn Recapture is minimum of the accumulated depreciation or the Gain on Sale
- Capital Gain is the Gain on Sale minus the Depn Recapture
- Depn Recap Tax is the Depn Recapture times the Depn Recapture Tax Rate
- Cap Gain Tax is the Capital Gain times the Capital Gain Rate
- Total Tax on Sale is the DepRecTax plus Cap Gain Tax. Link this figure to the appropriate cell to the left.