

MCP TOOL ROSTER

PinchFin v0.1.0 — Beta Release

PLATFORM OVERVIEW

PinchFin MCP exposes 24 tools through the Model Context Protocol, enabling institutional-grade CRE underwriting directly inside Claude Code. 17 tools are billable analysis modules; 7 are free account and utility tools. All analysis uses deterministic financial calculations with Claude providing institutional narrative synthesis.

TOTAL TOOLS	BILLABLE	FREE	ANALYSIS ENGINE	OUTPUT FORMATS
24	17	7	Claude + Valeri Data	JSON + DOCX

TIER 1 — DETERMINISTIC TOOLS

Fast, low-cost tools powered primarily by deterministic Python calculations (constraint waterfall, rate math, sensitivity analysis) with Claude providing narrative synthesis. SOFR and macro data pulled live from Federal Reserve via Valeri Data Services.

Tool	Description	Cost
pinchfin_deal_screen	Credit box pass/fail screening. Runs the 6-constraint waterfall (LTV As-Is, LTV Stabilized, DSCR, Debt Yield, LTC, Max Loan) against Veleta credit parameters. Identifies binding constraint. Pulls live SOFR and property context data. Returns pass/fail with narrative.	\$0.10–\$0.50
pinchfin_debt_sizing_preview	Quick 'how much can I borrow?' answer. Lightweight version of the full loan sizer — shows max loan by each constraint without full narrative. Ideal for initial sponsor conversations.	\$0.25–\$0.75
pinchfin_loan_sizer	Full 6-constraint waterfall loan sizing with sensitivity analysis. Shows max loan from each constraint, binding constraint detail, rate stress (+100bps), NOI stress (-10%), and comparison to broker request. Includes refinance exit test.	\$0.25–\$1.00
pinchfin_loan_pricing	Rate build-up analysis: index (SOFR) + spread = all-in rate. Rate cap strike and estimated cost. Interest reserve sizing (month-by-month shortfall method). Annual and monthly debt service. DSCR at pricing.	\$0.25–\$1.00
pinchfin_pref_equity_qr	Preferred equity sizing and quick review. Two-pass constraint system: Pass 1 validates senior debt independently, Pass 2 sizes pref equity against 9 constraints (combined LTV ≤80%, combined LTC ≤85%, pref IRR ≥14%, MOIC ≥1.40x, sponsor equity ≥10%, pref:common ≤2.0x, \$25M cap). Quarterly-compounding PIK accrual model with 50% flag. 5-scenario exit waterfall. Sponsor with/without comparison. Full 22-section DOCX output.	\$3.00–\$8.00

TIER 2 — RESEARCH TOOLS

Deep research modules that combine web intelligence, Valeri Data Services (Census, BLS, FRED, FEMA, HUD, Walk Score), and Claude synthesis. Each tool runs 5–8 parallel research queries and produces institutional-grade narrative with structured data.

Tool	Description	Cost
pinchfin_sponsor_analysis	Institutional sponsor due diligence. Entity verification, portfolio overview, track record analysis (deals, units, markets), financial capacity assessment, litigation and bankruptcy screening, operational capability evaluation. Returns sponsor tier (A/B/C/D), experience	\$0.50–\$2.00

	score (0–12), GO/NO-GO recommendation. 8 parallel research queries.	
pinchfin_market_research	MSA and submarket fundamentals. Population growth, median household income, employment drivers, unemployment rate, multifamily vacancy and rent trends, absorption, supply pipeline (units under construction as % of inventory), regulatory environment. Returns market rating (strong/moderate/weak) with supportable assumptions. 8 parallel queries.	\$0.50–\$1.50
pinchfin_comp_analysis	Comparable sales and rent analysis. Identifies 5–7 rent comps and 3–5 sales comps within the submarket. Applies adjustments for vintage, condition, amenities, and location. Derives market rent conclusion, loss-to-lease estimate, implied value range, and cap rate bracket. 5 parallel research queries.	\$0.50–\$1.50

TIER 3 — SYNTHESIS & JUDGMENT TOOLS

Complex analysis tools that combine multiple data sources, apply institutional methodology via loaded skill files, and produce deep analytical output. These tools use full SKILL.md methodology (150–600 lines each) with multi-skill composition and structured JSON output validation.

Tool	Description	Cost
pinchfin_rent_roll_analyzer	Rent roll parsing and anomaly detection. Unit mix aggregation, physical and economic occupancy, loss-to-lease by unit type, concession analysis, renovation segmentation (classic vs. renovated), lease expiration waterfall, and T-12 reconciliation flags.	\$0.25–\$1.00
pinchfin_cash_flow	Dual-scenario cash flow underwriting. Builds both Lender Underwrite and Sponsor Proforma scenarios. Income breakdown (GPR, other income, vacancy, concessions, bad debt), expense normalization, NOI derivation, 5-year projections, and 6-constraint sizing waterfall. All financial math is deterministic — Claude provides narrative only.	\$0.50–\$1.50
pinchfin_nuance_gate	Complex deal feature analysis. Detects and evaluates nuance flags: LIHTC (4%/9%), Section 8/HAP, rent control/stabilization, ground leases, tax abatements (421-a, PILOT), seismic retrofit, environmental concerns, complex ownership (TIC, JV). Returns GO/NO-GO/CONDITIONAL with financial impact estimates and regulatory research.	\$0.50–\$2.00
pinchfin_business_plan_analysis	Value-add business plan feasibility. Evaluates renovation budget against RSMeans benchmarks, rent lift potential vs. market support, lease-up timeline, and execution risk. Returns feasibility rating (strong/moderate/weak/not feasible) with conditions.	\$0.50–\$2.00
pinchfin_renovation_roi	Renovation return-on-investment analysis. Current rent vs. target rent, annual income increase, payback period in months, value creation at multiple cap rates (sensitivity table), and ROI recommendation. All calculations deterministic.	\$0.50–\$2.00
pinchfin_term_sheet_comparator	Side-by-side term sheet comparison. Analyzes	\$0.50–\$1.50

2+ competing term sheets across rate, spread, fees, term, IO period, prepayment, extensions, covenants, cash management, and reserves. Returns comparison matrix and preferred lender recommendation with rationale.

pinchfin_ic_memo	Investment Committee memorandum — the capstone document. Executive summary, deal narrative, sponsor assessment, market overview, financial analysis, risk assessment, sources and uses, key metrics strip, and recommendation (Approve / Approve with Conditions / Decline). Requires prior phase outputs for full depth.	\$1.00–\$3.00
pinchfin_deal_book	Document synthesis. Processes uploaded deal documents (OM, rent roll, T-12, appraisal, term sheets) into a structured deal package with extracted data points and cross-referenced findings.	\$0.75–\$3.00

COMPOSITE WORKFLOWS

Multi-step orchestrated workflows that internally call multiple Tier 1–3 tools in sequence, producing comprehensive analysis packages.

Tool	Description	Cost
pinchfin_quick_review	Full 10-minute deal screening workflow. Internally orchestrates: deal screen → sponsor analysis → market research → comp analysis → cash flow sizing → synthesis. Runs 21 parallel queries, pulls live macro data, executes the full constraint waterfall, and produces a screening recommendation with 4 DOCX reports (Quick Review memo, Sponsor report, Market report, Comps report).	\$2.00–\$6.00

FREE TOOLS

Account management and utility tools. No charge, no balance required.

Tool	Description
pinchfin_estimate_cost	Pre-run cost estimate for any module combination. Shows low/high range and hold amount.
pinchfin_account	Check balance, held funds, available balance, and recent transaction history.
pinchfin_deposit	Load funds via Stripe checkout. Returns a secure payment URL. Minimum \$25.
pinchfin_deal_status	Check workflow progress on any deal — phases completed, percentage, next steps.
pinchfin_list_deals	List all deals in your account. Filter by status (active/completed/archived).
pinchfin_upload_docs	Upload document metadata to a deal. Documents processed when analysis runs.
pinchfin_help	Full tool list with costs, descriptions, cost factors, and usage tips.

BILLING MODEL

Billing Type	Usage-based prepaid wallet
Starting Credit	\$50.00 (beta)
Minimum Deposit	\$25.00
Low Balance Alert	\$5.00
Cost Visibility	Estimate shown before every billable tool — you always confirm
Actual Charge	Based on real token usage, not the estimate

Cost Factors

Factor	Effect
Unit count <50	0.8x (simpler asset)
Unit count 50–150	1.0x (baseline)
Unit count 150–300	1.2x (moderate complexity)
Unit count 300–500	1.4x (complex)
Unit count 500+	1.6x (high complexity)
Re-run discount	35% off (cached context)
Document pages	\$0.05/page additional