Loan Data Analysis Project

Comprehensive analysis of financial loan dataset using Python to generate insights and support strategic lending decisions.

Key Performance Indicators

38,576

Total Applications

Loan applications received during analysis period

$435.76M

Total Funded

Amount disbursed as loans

$473.07M
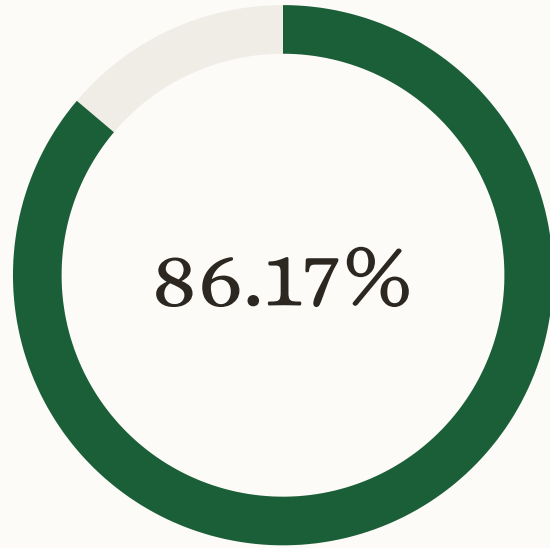
Total Received

Amount collected from borrowers

12.05%

Avg Interest Rate

Portfolio-wide lending cost

13.33%

Avg DTI Ratio
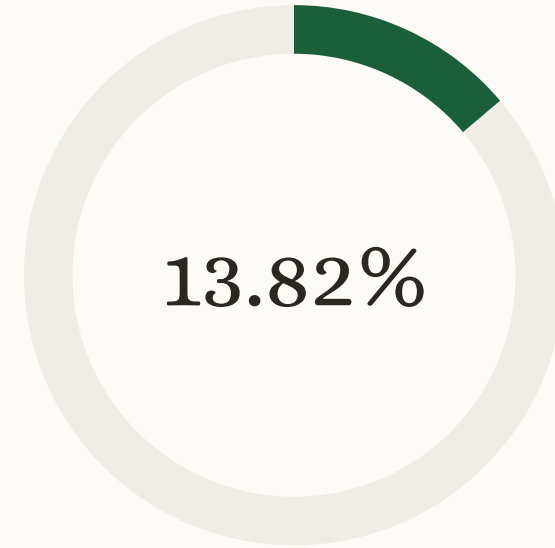
Borrower financial health indicator

Loan Portfolio Quality

Good Loans

86.17%

Application Rate

- **33,243** good loan applications
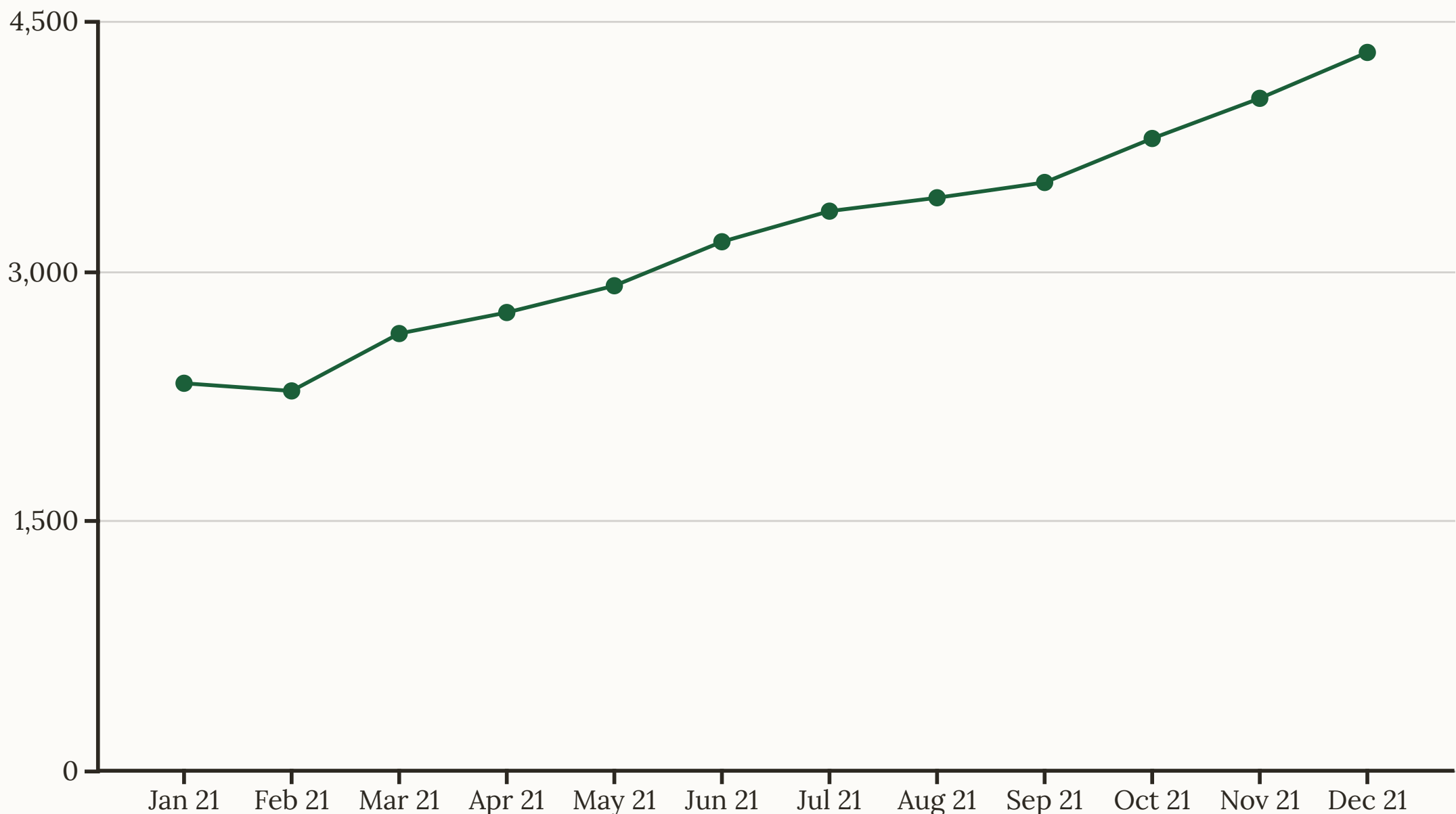- **$370.22M** funded amount
- **$435.79M** total received

Bad Loans

13.82%

Application Rate

- **5,333** bad loan applications
- **$65.53M** funded amount
- **$37.28M** total received

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Monthly Application Trends

Clear upward trajectory throughout 2021, with applications growing from 2,332 in January to 4,314 in December—an 85% increase indicating strong market demand.

Funding & Revenue Growth

Total Funded Amount

Steady growth from **$25.03M** in January to **$53.98M** in December, more than doubling disbursements throughout the year.
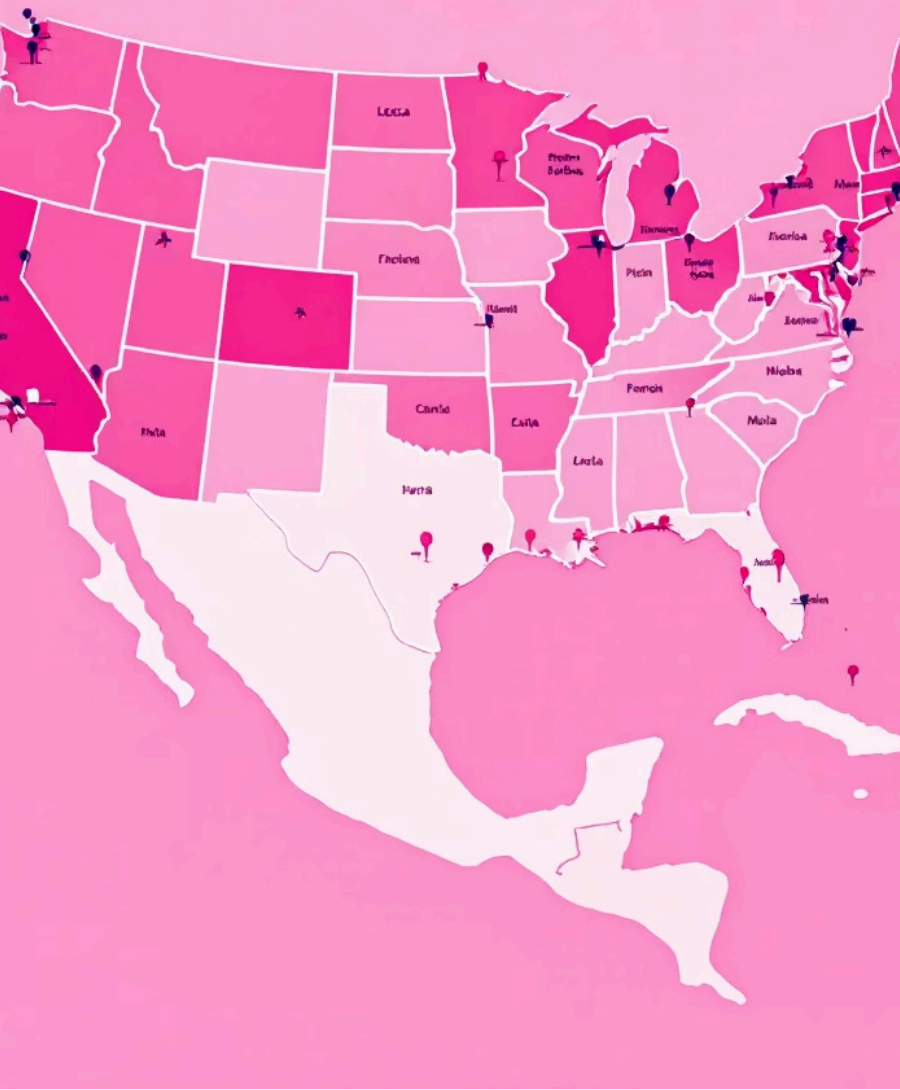
Total Received Amount

Collections increased from **$27.58M** to **$58.07M**, demonstrating strong repayment performance and cash flow.

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Top Lending States

California dominates with 6,894 applications and $42.08M funded. New York, Florida, and Texas follow as major lending markets.

1	**California**
	6,894 applications | $42.08M funded

2	**New York**
	3,701 applications | $31.24M funded

3	**Florida**
	2,773 applications | $30.05M funded

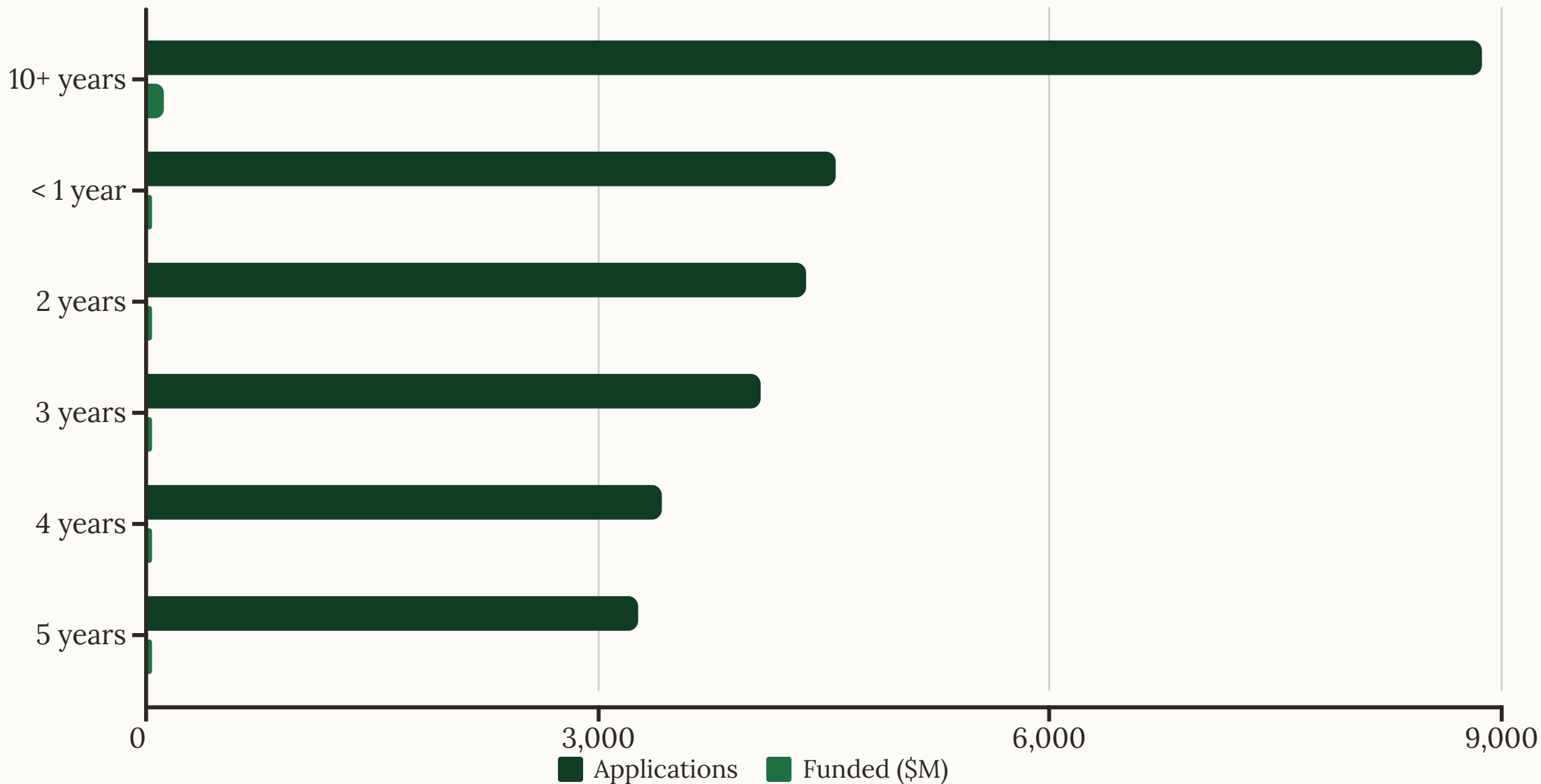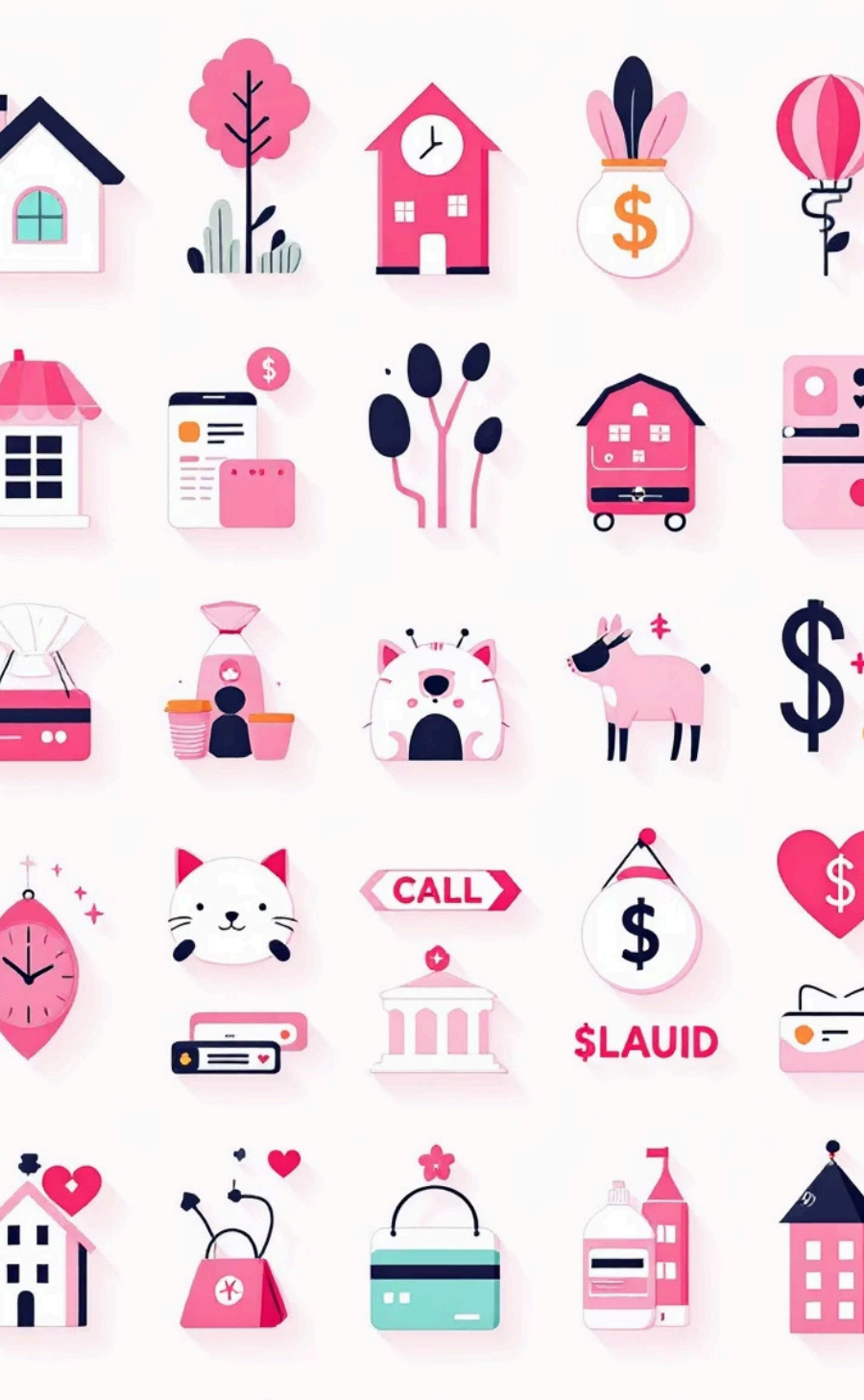| 4	**Texas**
	2,664 applications | $31.24M funded

Loan Term Distribution

73% of borrowers prefer 36-month terms, representing **$273.04M** in funded amount.

60-month terms account for **27%** of applications with **$162.72M** funded.

Legend: 36 months, 60 months

Employment Length Impact

Borrowers with 10+ years employment lead with 8,870 applications and $116M funded. Shorter employment histories show progressively lower volumes.

■ Applications ■ Funded ($M)

Loan Purpose Breakdown

Debt consolidation dominates with 18,214 applications (47%) and $233M funded, followed by credit card refinancing and home improvement.

Debt Consolidation

18,214 apps | $233M funded

Credit Card

4,998 apps | $59M funded

Home Improvement

2,876 apps | $33M funded

Other Purposes

3,824 apps | $31M funded

Key Insights & Methodology

01

Strong Growth

85% increase in applications throughout 2021 with consistent upward trends in funding and collections

02

Portfolio Quality

86% good loan rate demonstrates effective risk management and borrower selection

03

Regional Concentration

Top 4 states account for significant market share, suggesting targeted expansion opportunities

04

Data-Driven Approach

Python-based analysis with Pandas, Matplotlib, and Plotly enables actionable insights for lending strategy