The probability of default (PD) is a measure of the likelihood that a borrower will default on their credit obligations, such as loans or mortgages. The features listed are crucial in predicting PD through various models like credit scoring. Here's how each feature relates to PD:

1. **Fico_range_high**: This refers to the FICO score range, which impacts PD since higher scores correlate with lower risk of default.

2. **Loan_amnt**: Higher loan amounts may lead to more defaults if borrowers face financial constraints, making this a relevant factor in PD prediction.

3. **Annual_inc**: Higher annual incomes generally reduce the likelihood of defaults because borrowers can afford larger payments, affecting PD.

4. **Dti (Days-to-Monthly Payment)**: A higher debt-to-income ratio indicates a greater risk due to potential financial strain, increasing PD.

5. **Purpose**: Different loan types may have different default risks, such as home mortgages typically having lower PD compared to personal loans.

6. **Home_ownership_status**: Homeowners generally have lower PD than co-owners, so this feature is directly related to PD prediction.

7. **Emp_length**: Shorter employment durations can imply more credit history issues, increasing PD.

8. **Int_rate (Interest Rate)**: Higher interest rates increase the risk of default due to increased debt repayment obligations, making int_rate a key factor in PD models.

9. **Delinq_2yrs and Inq_last_6mths**: These indicate delinquency history. Consistent late payments can lead to higher PD.

10. **Tot_coll_amt (Total Collateral Amount)**: Higher collateral typically reduces default risk, making it a relevant feature for PD prediction.

11. **Mths_since_last_delinq**: The duration since the last delinquency influences PD; multiple issues may increase risk.

These features collectively assess various aspects of creditworthiness and debt history to predict default probabilities, aiding in better credit management and risk mitigation strategies.