Good Prime Numbers

By theorem, there are infinitely many good prime numbers.
see
https://www.geeksforgeeks.org/check-whether-a-number-is-good-prime-or-not/

And https://mathworld.wolfram.com/GoodPrime.html

To quote Geeks for Geeks webpage, 2025,

“In Mathematics, a good prime is a prime number whose square is greater than the product of any two primes at the same number of positions before and after it in the sequence of primes.”

Let p_n be the “n th” prime number. So,

p_1 is 2, p_2, is 3, p_3 is 5, and so on, as we count the prime numbers.
This is the prime counting function.

If, $(p\_n)^2 > p\_(n-i) * p\_(n+i)$ for all i such that $0<i<n$
then p_n is a good prime number

There are 11 good prime numbers less than 100.
They are 5, 11, 17, 29, 37, 41, 53, 59, 67, 71, and 97.
see oeis.org/A028388 for a longer list.
see academic paper by Carl Pomerance, 1979
https://math.dartmouth.edu/~carlp/PDF/paper19.pdf

Also, another kind of “good” prime [of the first kind] is less restrictive, and also an infinite set.
see https://oeis.org/A046869
defined as the set of all prime numbers p_n such that $(p\_n)^2 > (p\_(n-1)) * (p\_(n+1))$.