# Summary

The recent migration focused on streamlining frontend assets, optimizing resource loading, and refining the rendering pipeline across three core pages (Home/index, Data Table with 0 entries, Data Table with 100 entries). The result is a markedly snappier experience—paint times halved on desktop, load time cut by nearly 50% on mobile, blocking scripts eliminated on desktop, and layout stability retained at perfect scores. These gains translate into faster perceived performance for end users, reduced bounce risk (especially on data-heavy views), and a stronger foundation for future feature roll-outs.

## **Overall Performance Score Improvements**

Page	Device	Old Score	New Score	Δ Points
Index (Home)	Desktop	99	100	+1
	Mobile	83	97	+14
Table — 0 entries	Desktop	100	100	0
	Mobile	91	97	+6
Table — 100 entries	Desktop	100	100	0
	Mobile	83	92	+9

## **Category-by-Category Analysis**

### Index (Home) Page

#### Desktop

Sorted from greatest to least % improvement

- Total Blocking Time: 11 ms → 0 ms (-11 ms, 100% reduction)
- Cumulative Layout Shift: 0.0023 → 0 (-0.0023, 100% reduction)
- **Time to Interactive**: 775 ms → 327 ms (-448 ms, **58**% faster)
- Largest Contentful Paint: 745 ms → 327 ms (-418 ms, **56**% faster)
- First Contentful Paint: 714 ms → 327 ms (-387 ms, **54**% faster)

- **Speed Index:** 714 ms → 328 ms (−386 ms, **54**% faster)
- Performance Score: 99 → 100 (+1 pt, 1% uplift)

#### Mobile

Sorted from greatest to least % improvement

- Total Blocking Time: 238 ms  $\rightarrow$  45 ms (-193 ms, 81% faster)
- Time to Interactive: 3.23 s  $\rightarrow$  1.66 s (-1.57 s, 49% faster)
- Largest Contentful Paint:  $3.00 \text{ s} \rightarrow 1.55 \text{ s} (-1.45 \text{ s}, 48\% \text{ faster})$
- First Contentful Paint:  $2.89 \text{ s} \rightarrow 1.53 \text{ s} (-1.36 \text{ s}, 47\% \text{ faster})$
- **Performance Score**: 83 → 97 (+14 pt, **17**% uplift)
- Speed Index:  $4.39 \text{ s} \rightarrow 3.94 \text{ s} (-0.45 \text{ s}, 10\% \text{ faster})$
- Cumulative Layout Shift: 0 → 0 (unchanged)

### Table — 0 entries Page

#### **Desktop**

Sorted from greatest to least % improvement

- Total Blocking Time: 20 ms → 0 ms (-20 ms, 100% reduction)
- Time to Interactive:  $0.64 \text{ s} \rightarrow 0.37 \text{ s} (-0.27 \text{ s}, 42\% \text{ faster})$
- Largest Contentful Paint:  $0.61 \text{ s} \rightarrow 0.37 \text{ s} (-0.23 \text{ s}, 39\% \text{ faster})$
- First Contentful Paint:  $0.56 \text{ s} \rightarrow 0.37 \text{ s} (-0.19 \text{ s}, 34\% \text{ faster})$
- **Speed Index:**  $0.56 \text{ s} \rightarrow 0.37 \text{ s} (-0.19 \text{ s}, 34\% \text{ faster})$
- **Performance Score**: 100 → 100 (no change)
- Cumulative Layout Shift: 0 → 0 (unchanged)

#### Mobile

Sorted from greatest to least % improvement

- Total Blocking Time: 159 ms  $\rightarrow$  90 ms (-69 ms, 43% faster)
- Largest Contentful Paint:  $2.40 \text{ s} \rightarrow 1.61 \text{ s} (-0.79 \text{ s}, 33\% \text{ faster})$
- First Contentful Paint:  $2.27 \text{ s} \rightarrow 1.61 \text{ s} (-0.66 \text{ s}, 29\% \text{ faster})$
- Time to Interactive: 2.53 s  $\rightarrow$  1.93 s (-0.60 s, **24**% faster)
- **Speed Index**: 4.20 s → 3.79 s (-0.41 s, **10**% faster)
- **Performance Score**: 91 → 97 (+6 pt, **7**% uplift)

• Cumulative Layout Shift: 0 → 0 (unchanged)

### Table — 100 entries Page

#### Desktop

Sorted from greatest to least % improvement

- **Cumulative Layout Shift:** 0.0002 → 0 (-0.0002, **100**% reduction)
- Total Blocking Time: 49 ms  $\rightarrow$  1.5 ms (-47.5 ms, 97% reduction)
- Largest Contentful Paint:  $0.62 \text{ s} \rightarrow 0.37 \text{ s} (-0.25 \text{ s}, 41\% \text{ faster})$
- Speed Index:  $0.61 \text{ s} \rightarrow 0.39 \text{ s} (-0.21 \text{ s}, 35\% \text{ faster})$
- First Contentful Paint:  $0.56 \text{ s} \rightarrow 0.37 \text{ s} (-0.19 \text{ s}, 35\% \text{ faster})$
- Time to Interactive:  $0.68 \text{ s} \rightarrow 0.47 \text{ s} (-0.21 \text{ s}, 31\% \text{ faster})$
- **Performance Score**: 100 → 100 (no change)

#### Mobile

Sorted from greatest to least % improvement

- Total Blocking Time:  $0.43 \text{ s} \rightarrow 0.26 \text{ s} (-0.17 \text{ s}, 39\% \text{ faster})$
- Largest Contentful Paint:  $2.42 \text{ s} \rightarrow 1.57 \text{ s} (-0.85 \text{ s}, 35\% \text{ faster})$
- First Contentful Paint:  $2.16 \text{ s} \rightarrow 1.49 \text{ s} (-0.67 \text{ s}, 31\% \text{ faster})$
- Time to Interactive: 2.69 s  $\rightarrow$  2.07 s (-0.62 s, 23% faster)
- Performance Score: 83 → 92 (+9 pt, 11% uplift)
- **Speed Index:**  $4.08 \text{ s} \rightarrow 3.91 \text{ s} (-0.17 \text{ s}, 4\% \text{ faster})$
- Cumulative Layout Shift: 0 → 0 (unchanged)

## **Conclusions**

- Outstanding Wins:
  - o On **desktop**, paint metrics (FCP, LCP, Speed Index) now render under **0.4 s** across all pages—even with 100 rows—while blocking time has been virtually eliminated.
  - On **mobile**, FCP/LCP are down by **30–50**%, with table-heavy views now loading in under **1.6 s**, improving perceived speed and interaction readiness.