



City of Red Bank Public Works Department

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Ashland Terrace Safety and School Zone Study

This is a Study and does not require any implementation by the City of Red Bank. Thee study evaluates the feasibility of **right-sizing Ashland Terrace** between **Dayton Boulevard and Knollwood Drive/Crestview Drive** to improve **traffic operations and safety**. Additionally, it examines school circulation enhancements for **Point Christian Academy**, including **speed limit adjustments** and **traffic signal synchronization**.

Feasibility of Right-Sizing Ashland Terrace

The proposed **lane reduction** would convert Ashland Terrace from **four lanes to three**, incorporating a **dedicated center turn lane**. The study applies **TDOT's Road Diet Guidance Manual**, which outlines criteria for traffic volume thresholds suitable for right-sizing projects.

- **Projected Daily Traffic:**
 - 2024 AADT (Annual Average Daily Traffic) → 17,604 vehicles per day.
 - 2034 AADT projection → 19,833 vehicles per day, a 7.3% five-year growth rate.
- **TDOT Guidelines** indicate road diets are typically feasible **below 20,000 AADT**, making Ashland Terrace a **viable candidate**.
- The expected **crash reduction** from the lane reconfiguration is **47%**, according to **Crash Modification Factor (CMF) Clearinghouse data**.
- However, **peak-hour vehicle counts** exceed **875 vehicles per hour per direction**, suggesting potential **LOS degradation**, requiring further evaluation.

Daily Vehicle Traffic Volumes

- **Ashland Terrace: 17,604 vehicles per day (AADT 2024)**
- **Dayton Boulevard: 11,195 vehicles per day (AADT 2024)**

The study suggests that the projected increase in daily traffic may **require additional signal timing adjustments and operational assessments** before finalizing lane reductions.

Traffic Signal Synchronization

The study recommends **signal timing coordination** to improve traffic progression:

- **Dayton Boulevard between Leawood Avenue & Ashland Terrace:** Signal phasing and optimized clearance intervals are suggested.
- **Ashland Terrace at Dayton Boulevard:** Timing modifications are advised to minimize intersection queuing.
- **School Speed Zone Signals: Flashing beacons** should be integrated to alert drivers during school hours.

Current and Future Level of Service (LOS)

The study assesses LOS across **existing, no-build, and right-sized scenarios:**

Intersection	Current LOS (2025)	Projected No-Build LOS (2035)	Projected Right-Sized LOS (2035)
Ashland Terrace at Dayton Blvd	C (AM), C (PM)	E (AM), F (PM)	E (AM), F (PM)
Ashland Terrace at Knollwood Dr/Crestview Dr	F (AM & PM)	F (AM & PM)	F (AM & PM)
Ashland Terrace at Tacoma Ave	F (AM), E (PM)	F (AM & PM)	F (AM & PM)

Key Takeaways from LOS Analysis:

- Without intervention, **LOS declines significantly by 2035**, especially at major intersections.
- **Right-sizing alone does not improve LOS** due to heavy peak-hour traffic volumes.
- Additional **traffic control measures** (signal upgrades, turn restrictions) will be required.

Recommended Speed Limit Changes

- **Ashland Terrace:** Increase from **25 mph to 35 mph** to align with observed **85th percentile speeds (37 mph)**.
- **Dayton Boulevard:** Lower from **40 mph to 35 mph**, consistent with previous speed studies.

These adjustments aim to **reduce excessive speeding and improve compliance with roadway conditions.**

Short-Term and Long-Term Traffic Signage & Road Modifications

Short-Term Recommendations

1. **Install school speed zone signs with flashing beacons** along Ashland Terrace and Dayton Boulevard near **Point Christian Academy**.
2. **Restrict left turns at:**
 - **Southbound Tacoma Avenue at Ashland Terrace** due to limited sight distance.
 - **Northbound Bank Street at Ashland Terrace** due to skewed intersection geometry.
3. **Enhance pedestrian visibility** through new **signage and pavement markings**.
4. **Implement signal timing changes** at Dayton Boulevard & Ashland Terrace to minimize intersection queuing.

Long-Term Recommendations

1. **Evaluate right-sizing of Ashland Terrace east of Knollwood Dr/Crestview Dr** before fully implementing lane reductions.
2. **Upgrade traffic signals** along Dayton Boulevard to synchronize movements and reduce congestion.
3. **Refine school drop-off circulation patterns** to prevent queue spillback onto Ashland Terrace.

Conclusion

The study presents a **data-driven case** for right-sizing **Ashland Terrace**, adjusting **speed limits**, synchronizing **traffic signals**, and enhancing **school zone safety**. While the **lane reduction** meets **TDOT feasibility criteria**, **LOS challenges** suggest further **signal optimization** and **traffic flow adjustments** before full implementation. The City of Red Bank should prioritize **short-term safety improvements** while refining **long-term infrastructure strategies**.