

Preliminary Preferred Alternative (PPA)

A conceptual Preliminary Preferred Alternative (PPA) is proposed for transportation improvements for the nearly 2.8 mile long segment of the Monmouth County Route 537 (CR 537) corridor using results from existing (2012) and future (2032) condition traffic analyses. Improvements are proposed to mitigate deficient Levels of Service, improve traffic safety, and to better accommodate all modes of transportation, including walking, bicycling, and public transit.

Level of Service ‘(LOS) D’ (average delays between 35 and 55 seconds) is generally considered as the acceptable limit of delay for most drivers in a suburban setting; and was the basis used for developing the proposed operational improvements at the signalized intersections along the corridor.

The PPA includes the following proposed improvements:

- **Providing the missing sidewalks** that meet current design standards, along both sides of CR 537 to address the heavy pedestrian demand from just west of Iron Bridge Road to the U.S. Route 9 interchange. Sidewalks will be extended north and south of intersections as needed. All sidewalks will be constructed within the allocated 10 foot roadside buffer. The missing sidewalk on the westbound side of the CR 537 bridge over US Route 33 will also be provided.
- **Providing 15’ outside lanes** along both sides of CR 537 from just west of Iron Bridge Road to the NJ Route 33 Business (Park Avenue) intersection to address the heavy demand to provide bicycle compatibilities.
- **Enhanced Public Transportation Services** for the corridor include providing four designated bus stops in coordination with NJ Transit. Sidewalks to be installed will improve pedestrian circulation and access to and from the bus stops. ADA-compliant crosswalks will be installed at all intersections to provide a means for pedestrians crossing CR 537; thereby further enhancing access to and from the bus stops along the corridor.
- **Developing access management strategies** in coordination with the proposed intersection operational improvements to reduce conflict points and congestion along the corridor.
- Providing an interconnected traffic signal system (**ITS Improvements**) that will coordinate the green time intervals between the various traffic signals. This will help minimize delays between the traffic signals and improve overall traffic flow along CR 537.
- **Elimination/improvement of the Substandard Vertical (Sag) Curve near CR 537 Milepost 50** (just west of Redwood Lane& Village Center Drive intersection) involves raising the CR 537 profile up to a maximum of 11 inches for a length of approximately 500 feet.
- **Improve sight distance for turning vehicles from Enright Avenue onto CR 537** by removing trees that obstruct sight distance and by minor widening of CR 537.

The PPA also includes the following operational improvements at the following locations along the CR 537 Corridor:

- **Iron Bridge Road & CentraState Medical Center Intersection – Concept 2** which includes the addition of an eastbound CR 537 right turn lane onto Iron Bridge Road. This lane will improve delays for this right turn movement; and allowing these turns to move in a separate lane will increase the efficiency of the two exclusive through lanes. The center northbound Iron Bridge Road lane is converted from an exclusive through movement to a shared left turn and through movement. The pedestrian crossing phase across both side street signal phases will be extended.

With the proposed improvements, all intersection movements operate at Level of Service “D” or better during all peak periods.

- **Redwood Lane & Village Center Drive Intersection – Concept 2** which includes the addition of both a left turn lane and a right turn lane on the northbound Redwood Lane approach. The pedestrian crossing phase across both side street signal phases will be extended.

With the proposed improvements, all intersection movements operate at Level of Service “D” or better during all peak periods.

- **Stillwells Corner Road & Wemrock Road Intersection – Concept 3** which includes widening of the northbound Stillwells Corner Road by two lanes to provide two left turn lanes, two through lanes, and one right turn lane; widening of the southbound Wemrock Road approach by two lanes to provide two left turn lanes, two through lanes and one right turn lane; and widening of the CR 537 eastbound approach to provide two left turn lanes; two through lanes, and a shared through/right turn lane. The western approach to the intersection provides three through lanes on eastbound CR 537 to the Wal-Mart Drive intersection; and two left turn lanes, two through lanes, and a shared through/right turn lane on westbound CR 537. Traffic signal phasing will be modified to provide protected-only left turns on CR 537; split side street phasing; and overlapping right turn green arrow phases on all four approaches.

With the proposed improvements, all intersection movements operate at Level of Service “D” or better during all peak periods.

- **Wal-Mart Drive & Castronova Way Intersection – Concept 3** which includes widening CR 537 to provide three through lanes in both directions between this intersection and Wemrock Road/Stilwells Corner Road; and widening to provide a second left turn lane on the southbound Castronova Way approach to the intersection. Overhead signage will be provided on CR 537 westbound for the exclusive right turn lane approaching the Wemrock Road and Stillwells Corner Road intersection.

With the proposed improvements, all intersection movements operate at Level of Service “D” or better during all peak periods.

- **Trotters Way Intersection – Concept 1** which includes widening and increased radius of the CR 537 eastbound jughandle ramp to Trotter’s Way to meet current design criteria

and address same-direction sideswipe crashes occurring at this location. To address safety concerns and driver expectations, westbound CR 537 is widened to provide through lanes and one exclusive right turn lane. The new third through lane becomes an “exit only” ramp to the Route 33 Freeway westbound. Overhead signing is to be installed at the point where the new third lane is introduced. The overhead signs will indicate the two leftmost lanes for CR 537 westbound; the next lane for Route 33 westbound; and the right lane for Trotters Way/Freehold Raceway Mall.

To address same-direction crashes due to different driver’s interpretations of traffic control, with some slowing or stopping at the yield sign and others entering the receiving lane and then merging; the right turn movement from Trotter’s Way to CR 537 westbound will be controlled by the traffic signal and will no longer function under yield control.

- **Park Avenue (NJ Route 33 Business) Intersection – Concept 1** which includes widening of the CR 537 eastbound approach for the addition of a 125 foot long dedicated left turn lane, and widening of the CR 537 westbound approach for the addition of a 75 foot long dedicated left turn lane. The Park Avenue approaches will be realigned so that the left turn lanes are directly opposing each other, which will improve the geometric efficiency of the intersection. Realignment of the Park Avenue left turn lanes will allow the provision of 8 foot wide shoulders on the Park Avenue approaches to the intersection, thereby eliminating this existing substandard condition.

With the proposed improvements, all intersection movements operate at Level of Service “D” or better during all peak periods.