2010 Newark Transportation Plan DRAFT Preliminary Recommendations

Recommendation	Summary
Congestion and Safety Improvements	
Implement a Newark Corridor Optimization Program – Initially to include: 1. Elkton Rd. (10 signals) 2. Cleveland Ave. (6 Signals) 3. Library Ave (4 Signals) 4. S. College Ave. (+10 Signals)	• All non-complaint/faulty equipment shall be repaired and new traffic volume data shall be collected for use in developing corridor specific optimized timing plans. • Installation of a traffic adaptive signal system for the S. College Ave and Route 4 Corridors.
W. Park Place traffic calming improvements from Elkton Rd to S. College Ave.	• Cost effective traffic calming plan that keeps existing mid-block curb lines intact and restores the corridor to a more residential quality. Design concepts will include: 1. A reduced road width at intersections with short sections of raised medians on intersection approaches. 2. Use of "sharrow" bicycle markings to delineate area of shared roadway use. Sharrows are recommended from Elkton Rd to Beverly Rd where on street parking exists and through intersections where islands are use to narrow the roadway. 3. Bike lanes are recommended from Beverly to S. College where no on-street parking exists. 4. Re-evaluate signal warrants along the corridor. Consider converting signals to 4-way stop control. Candidate intersections for signal removal include: W. Park and Apple Rd, W. Park and Orchard Rd. 5. Pedestrian scale lighting
S. College Ave Gateway/Mobility Improvements from Main St. to the Gateway Bridge.	• Modified roadway cross-section that focuses on improved mobility along the corridor for all modes. • Includes full width bike lanes throughout the corridor. • Improved connection from the City's core to the Train Station area.
Cleveland Avenue Road Diet from Capital Trail (Kirkwood Hwy) to N. Chapel Ave. /Pomeroy Trail.	• Modified roadway cross-section that focuses on improved mobility along the corridor for all modes. • Includes full width bike lanes throughout the corridor. • Exclusive left turn lanes to be added along the corridor • Intersection capacity and Levels of service would not be negatively impacted. • Cons – Some existing business driveways would be restricted to right-turns only. A no stopping condition on Cleveland Avenue would need to be enforced.
Cleveland Avenue and N. College Ave. – Intersection capacity upgrade	• Includes improvement to the northbound approach by adding an exclusive right turn lane. • Modifications will include provisions for sidewalk and crosswalks.
Ogletown Rd (Route 273) at Marrows Road – Roadway alignment upgrade	• Includes improvement to the existing lane alignment between Marrows Rd. and Library Ave in the westbound direction. (Paint Only) • Existing signing shall also be modified and updated to reflect the proposed configuration changes. •

N. Chapel St. underpass and Cleveland Ave - northbound right-turn lane extension and improvement of substandard design.	• Short-term – No operation traffic benefits are gained by extending the NB right turn lane. Traffic level of service and vehicular queues would be unchanged. • Long term - Future improvements to the CSX overpass should include provisions for a standardized right-turn lane.
Wyoming Rd and Marrows Road Corridor Capacity Preservation Efforts	• As a means to accommodate growth and maintain acceptable levels of service along these corridors, land use decisions and access management strategies should be focused on the possibility of long term dualization (2 lanes in each direction) on these roadways. • Effort to preserve capacity should coordinate with UD's 2008 Newark Campus Capacity Study which recommends Wyoming Rd as a planned campus gateway. •
Delaware Ave Extension to Marrows Rd. – Corridor preservation	• As means to address future growth and reduce traffic along Library Ave. provisions should be implemented so that any planned redevelopment of the College Square shopping areas will include extending Delaware Ave. to Marrows Rd. • This added link would introduce a small grid system to the area, which would reduce trip lengths and distribute traffic more evenly throughout the area.
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Pedestrian Improvements	
High Intensity Activated Crosswalks (HAWK)	• Possible locations include: 1. Delaware Ave between Academy St and College Ave. 2. S. College Ave. between Ritter Lane and the railroad overpass. 3. Elkton Rd. mid-block crossing locations
Library Avenue – Jaywalking mitigation efforts.	• The proposed concept is to provide a center median to serve as a pedestrian refuge area with individually marked crosswalks for the eastbound and westbound travel lanes. • Slight relocation to existing bus stops facilities would also be made to enhance visibility of pedestrians. • Low level planting (20" or less) to maintain visibility
Implement City-wide initiatives for walkability	• Rejuvenate maintenance operations that focus on providing well defined crosswalks with uniform markings and signage throughout the City. • Develop a program to convert all pedestrian signal indications to include countdown timers. • For new and re-construction projects, develop strategies that minimize crossing distances. Policies should aim to keep roadway improvements focused on more traditional urban design. Items shall include: 1. Controlling the number and width of travel lanes 2. Using the smallest curb radius practicable to better manage pedestrian conflicts with turning vehicles. 3. Placing crosswalks in a way that reduces or eliminates any degree of skew. 4. Utilize curb extensions (bulb outs) 5. Where medians of 6 feet or wider are present design the median as a pedestrian refuge, with two shorter and separate crossings on each side of the median. 6. Continue to design all crosswalk locations to accommodate disabled pedestrians (ADA complaint)

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Bicycle Improvements	
Delaware Ave East/West Bicycle Linkage - Includes providing a separated westbound bike lane between Orchard Rd and east of Chapel Street	• Delaware Avenue signals would be modified to accommodate WB bike traffic. • The WB bike lane would terminate at Orchard Rd. Cyclists would then be directed left onto Orchard Rd. to Amstel Ave • Marked "Bike Boxes" are proposed at EB signalized locations and should be monitored on a trial basis.
Bicycle signal detections improvements -	• Implement newer technologies. Continue the increased use of above ground video detection as a replacement for traditional inductive loop detectors.
Recommendation	**Summary**
Parking Improvements and Planning	
• University of Delaware's Zipcar Program	• This newly implemented program should be monitored for its effectiveness. If successful the program should be expended in the future beyond the 4 initial vehicles.
• Continue Parking Management Initiatives	• Long term plans for structured parking on Lot #1 (behind Grottos) should continue to progress. • Short Term plans to implement the "morepark" elevated parking system on existing surface lots will likely provide for healthy occupancy rates in the interim.
Recommendation	**Summary**
Transit Service Improvements	
• Transit Hub Re-establishment Efforts	• Currently, this transit facility is oriented primarily to DART bus routes while the potential connections with other bus routes are not well established. To respond to this situation, the adjacent bus stops on Main and Delaware would have special treatments that indicate the proximity of the Transit Hub. This would include features such as bus stops signs, passenger waiting shelters, real-time schedule information (e.g., Next Bus) and concrete pavers or other materials to denote the extension of the Transit Hub to the nearby cross streets • Review possibility of rerouting other services (UD, Unicity) to Transit Hub.
• City-wide Amenities	• The current system is lacking in terms of features that identify the transit system. This would include bus stops signs at all locations for the UniCity which indicates the service, route and phone and web page to obtain transit information. With the exception of City Hall, there are few bus stop signs along the UniCity bus routes. Other elements of this recommendation would be passenger waiting shelters at benches at the more heavily utilized bus stops(subject to DTC installation & maintenance criteria/policy). Another feature that can increase transit visibility and ridership is to install ride guides at key locations which list schedule times for that bus stop.
• Improved Marketing Efforts	• Provide a single source of information on the transit services provided by each agency. A single transit map should be prepared for Newark which would show all routes, schedule times, fare information and contact phone numbers and web addresses to contact each agency.
• Service Modifications	• Consider consolidation of the three existing UniCity routes into a single bus route. Due to uniform coverage area the DART Route 31could also be eliminated as part of this consolidation.
• Transit Signal Priority Pilot project	• Review potential for pilot project. Transit Signal Priority extends green traffic signal or provides early green signal when bus is approaching. Possible corridor would be along S. College Avenue to the Laird campus (12 signals total).