SAFETY ADVISORY AND TRANSPORTATION COMMITTEE
A G E N D A

JULY 24, 2013 - 5:00 P.M.

CITY HALL CONFERENCE ROOM
15 LOOCKERMAN PLAZA
DOVER, DELAWARE

Public comments are welcomed on any item and will be permitted at appropriate times. When possible, please notify the City Clerk (736-7008 or e-mail at CityClerk@dover.de.us) should you wish to be recognized.

AGENDA ADDITIONS/DELETIONS

1. **Requests for Fifteen (15) Minute Parking**
   - **A. Loockerman Street**
     (Staff Recommends Reviewing the Request as Well as Input from the Downtown Dover Partnership (DDP), Downtown Businesses, and Other Interested Parties Prior to Making a Formal Recommendation. If There Is Favorable Consensus for the Request, Staff Will Implement the Change to the Time Limits for the Referenced Parking Spaces)
   - **B. Governors Avenue Behind Bayard Plaza**
     (Staff Recommends Reviewing the Request as Well as Input from the Downtown Dover Partnership (DDP), Downtown Businesses, and Other Interested Parties Prior to Making a Formal Recommendation. If There Is Favorable Consensus for the Request, Staff Will Implement the Change to the Time Limits for the Referenced Parking Spaces)

2. **Discussion - Left-Turn Restrictions at Loockerman Street and Governors Avenue**
   (Staff Recommends Holding a Public Hearing at the Next Regular Safety Advisory and Transportation Committee Meeting to Receive Public Comments on the Proposed Turn Restrictions Prior to Formal Action Regarding the Request)

3. **Debriefing/Post-Mortem on Firefly Music Festival *(Presentations by the Department of Planning and Inspections and the Dover Police Department)***
   (Committee Action Not Required)

4. **Update - Dover High School Construction**

5. **Briefing on Delaware Department of Transportation (DelDOT) Projects**
   - **A. DelDOT Repaving Project**
   - **B. West Dover Connector**
   - **C. Rt 8/Hazlettville Road Connector (North/South Road Between Rt 8 and Hazlettville Road on the West Side of the Capital School District Property and the Village of Cannon Mills)**

6. **Briefing on Dover/Kent County Metropolitan Planning Organization (MPO) Projects - *Rich Vetter***

/tm
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THE AGENDA ITEMS AS LISTED MAY NOT BE CONSIDERED IN SEQUENCE. THIS AGENDA IS SUBJECT TO CHANGE TO INCLUDE THE ADDITION OR THE DELETION OF ITEMS, INCLUDING EXECUTIVE SESSIONS.

ACTION FORM

PROCEEDING: Safety & Transportation Committee	**AGENDA ITEM NO.:**
DEPARTMENT OF ORIGIN: City Manager's Office	**DATE SUBMITTED**: 7/22/13
PREPARED BY: Scott D. Koenig, P.E., City Manager	
SUBJECT: Request for Fifteen (15) Minute Parking – A. Loockerman Street & B. Governors Avenue Behind Bayard Plaza	
REFERENCE: N/A	
RELATED PROJECT: N/A	
APPROVALS: City Manager	
EXHIBITS: Letter from the Downtown Dover Partnership dated June 11, 2013.	
EXPENDITURE REQUIRED: $150.00 (Estimated for Signage). **AMOUNT BUDGETED**: $16,000.00 **FUNDING SOURCE (Dept./Page in CIP & Budget)**: Public Works – Streets Division Budget (110-1800-554.20-43) - (Street Signs/Markings).	
TIMETABLE: Upon Council Approval.	
RECOMMENDED ACTION: Staff recommends reviewing the request as well as input from the DDP, downtown businesses and other interested parties prior to making a formal recommendation. If there is favorable consensus for the request, staff will implement the change to the time limits on the referenced parking spaces.	

BACKGROUND AND ANALYSIS

City staff is in receipt of a request from the Downtown Dover Partnership regarding the conversion of three (3) 2-hour on-street parking spaces to three (3) 15-minute parking spaces on Loockerman Street in front of and adjacent to 22-24 West Loockerman Street. The intent of the request is to accommodate some of the EZ Pass retail customers that DelDOT and TransCore anticipate coming to the EZ Pass's new downtown location. The request will alter the availability of parking in the City's downtown business district and could affect multiple properties in the vicinity. Currently, all of the on-street parking in this area has a 2-hour parking limit that is monitored by the City' parking enforcement staff.

City staff is also in receipt of an email request from the Downtown Dover Partnership to convert one (1) 2-hour parking space in front of 212 S. Governors Avenue (adjacent to the new Bayard Plaza) to a 15-minute Loading Zone/parking space.

Staff is concerned about the ability to "police" the proposed 15-minute time limit as our staff is currently not visiting these spaces on such a schedule. Our manpower authorizations will not allow for a 15-minute schedule; therefore, compliance would most likely be determined by the honor system. In addition, if additional requests are received, the parking configuration downtown could be significantly altered and negatively affect some downtown businesses.

Downtown Dover Partnership
101 W. Loockerman St. Suite 1a
Dover, Delaware, 19904
302-678-2940

City of Dover
RECEIVED
JUN 13 2013
CITY MANAGER/MAYOR

June 11, 2013

City of Dover
P.O. Box 475
Dover, DE 19903
Attn.: Scott Koenig, City Manager

RE: 15 Minute Parking Request

Dear Scott:

The purpose of this letter is to follow up our meeting of June 5, 2013 where the EZ Pass parking needs was mentioned.

Specifically, this letter is to request consideration to convert three out of the five (5) parking spaces in front of 22-24 Loockerman Street to "15 Minute" parking spaces. I verified that there are five (5) parking spaces beginning in front of the pizza shop leading to the "bump out" to the west. The intent of this parking space conversion would be to accommodate a few of the fifty (50) daily EZ Pass retail customers that DelDOT and TransCore anticipate coming to EZ Pass's new downtown location. So that we can report back to TransCore, can you tell me what would it take to make this conversion a reality and what is the timeline for completion?

Please contact me if you have any questions.

Sincerely,

Louis D. Colon
Executive Director
DOWNTOWN DOVER PARTNERSHIP

Cc: Gregory V. Moore, President

Skezpass rev\ldc

ACTION FORM

PROCEEDING: Safety & Transportation Committee	**AGENDA ITEM NO.:**
DEPARTMENT OF ORIGIN: City Manager's Office	**DATE SUBMITTED**: 7/22/13
PREPARED BY: Scott D. Koenig, P.E., City Manager	
SUBJECT: Discussion – Left-Turn Restriction at Loockerman Street and Governors Avenue	
REFERENCE: N/A	
RELATED PROJECT: N/A	
APPROVALS: City Manager	
EXHIBITS: Traffic Engineering Study prepared by DelDOT staff dated May 9, 2013.	
EXPENDITURE REQUIRED: $150.00 (Estimated for Signage). **AMOUNT BUDGETED**: $16,000.00 **FUNDING SOURCE (Dept./Page in CIP & Budget)**: Public Works – Streets Division Budget (110-1800-554.20-43) - (Street Signs/Markings).	
TIMETABLE: Upon Council Approval.	
RECOMMENDED ACTION: Staff recommends holding a public hearing at the next regular Safety & Transportation Committee Meeting to receive public comments on the proposed turn restrictions prior to formal action regarding the request.	

BACKGROUND AND ANALYSIS

In December of 2012, City staff forwarded a request from the Dover City Council to review traffic back-ups that are created on Loockerman Street due to left turn being allowed onto Governors Avenue. DelDOT has completed the requested study. The general conclusion of the study is as follows:

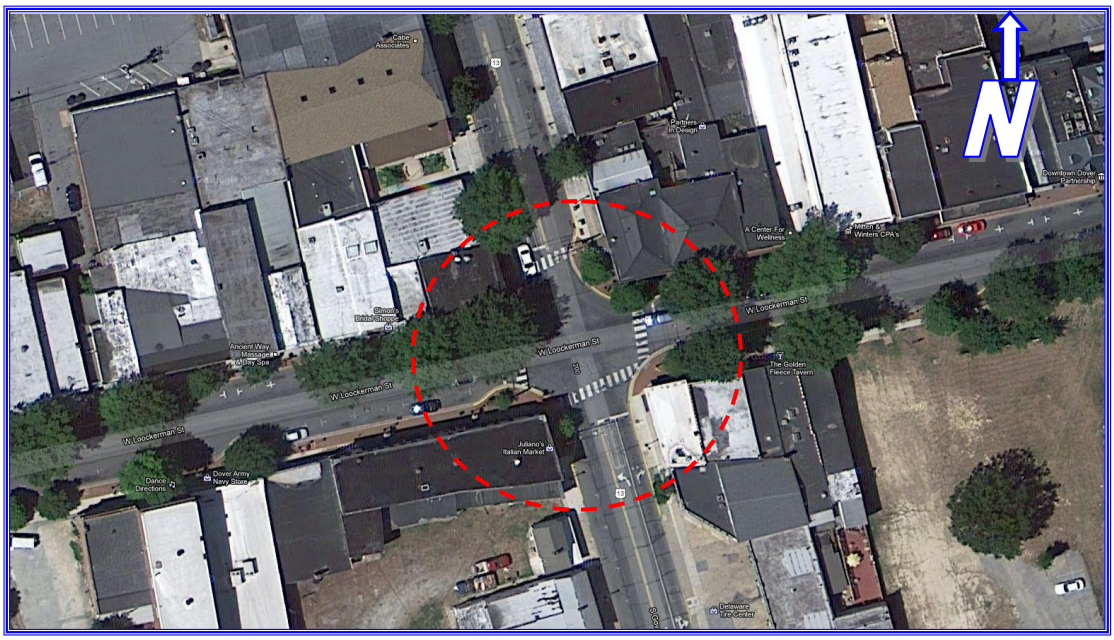
There will be overall improvement to the intersection operation if a left turn restriction is followed by motorists since the issues seen during the study (motorists running the red light or missing the green phase on W. Loockerman Street) would be eliminated. Therefore, the Department of Transportation has no objection with the City of Dover establishing a left turn restriction at the intersection. As noted in the original request by Dover, the local business community near the intersection should be contacted to get their feedback before deciding if the left turn restriction is put in place by the City.

Based on the review of the study completed by the Delaware Department of Transportation, staff recommends holding a public hearing at the next regular meeting of the Safety & Transportation Committee to receive public comments from the downtown business owners and other interested parties who may be affected by the turn restrictions. Once public comment has been received, staff recommends the committee vote on a formal action based on the study results and public comments.

WEST LOOCKERMAN STREET (K23) AND SOUTH GOVERNORS AVENUE, US 13A (K3) - TURN RESTRICTION STDY

TRAFFIC REQUEST:

A request has been made from the Dover City Council to determine if left turns can be restricted from West Loockerman Street (K23) onto South Governors Avenue, US 13A (K3) in downtown Dover given the long queues created along West Loockerman Street when a motorist attempts to make a left turn at the signalized intersection. If determined to be feasible, the turn restriction would be modeled after the existing one at the signalized intersection of East/West Loockerman Street and South State Street/Kings Highway located three blocks to the east. Left turns are restricted on East and West Loockerman Street at South State Street from Monday to Saturdays 8 am- 6 pm with exceptions all day on Sundays and holidays. It has been reported from City Manager Scott Koenig that left turn restriction signs were installed at the S. Governors Avenue and W. Loockerman Street signal in the past but was removed sometime during the 1990s given the concerns from downtown businesses. With this request, the City of Dover will coordinate with the local business through the Downtown Dover help determine if a left turn restriction should be established on W. Loockerman Street. No turn restriction resolutions were found at this intersection in the Department's files; however it was noted as a part of a field observation during field observations as part of the 1997 HEP study. There is one travel lane on both approaches on W. Loockerman Street to accommodate left, through, and right turn movements at the signal while both approaches of S. Governors Avenue have separate left turn lanes and shared through/right turn lane. There are also pedestrian signals and crosswalks across all four approaches. This intersection has been a part of the Hazard Elimination Program twice since 1996. In 1997, this intersection was part of site Y and resulted in pavement marking improvements and the trimming of trees near the intersection. In 2012, this intersection was part of site CC, which resulted in overall signing and striping improvements along E./W. Loockerman Street. A map of the location follows on the next page.



INFORMATION USED TO COMPLETE THE TRAFFIC STUDY:

The following information was utilized for the engineering study:

- Field Inspection of the West Loockerman Street (K23) and South Governors Avenue, US 13A (K3) intersection
- Eight Hour Traffic Count at the intersection
- Crash Data from within the last three years (April 4, 2010 to April 4, 2013)
- HCS+ Analysis of the Intersection

FINDINGS AND RESULTS:

Field Inspection

- The S. Governors Avenue and W. Loockerman Street signal is a four-legged intersection in downtown Dover. S. Governors Avenue runs north and south and is designated as alternate route US 13. The roadway is located between US 13 at its southern limits and changes to N. Governors Avenue north of Division Street, SR 8 ending at the intersection with Walker Road and North State Street. S. Governors Avenue is adjacent to several neighborhoods and local businesses and attractions such as Kent General Hospital and Wesley College. W. Loockerman Street runs east and west between South State Street at its eastern limit and turning into Forest Street at its western limit. Forest Street then connects to West Division Street, SR 8. East of S. State Street, the roadway becomes E. Loockerman Street and eventually connects to US 13. East of US 13 the roadway is a street maintained entirely by the City named Loockerman Road that ends at North Little Creek, SR 8. Several small businesses and

City buildings are located off of E. and W. Loockerman Street such as retail, specialty shops, eateries, and the new Dover Public library.

- In the downtown area, S. Governors is a two lane roadway with several marked on-street parking spaces in the downtown area parking restriction signs and/or painted yellow curb is installed in locations where parking is not allowed. A double yellow centerline separates traffic in opposite direction and separate turn lanes exist at signalized intersections including the intersection with W. Loockerman Street. The speed limit is 25 mph and the road is classified as a minor arterial. The 2011 roadway AADT is 8,601 between North Street and W. Loockerman Street last counted in 2010 and 6,073 between W. Loockerman Street and SR 8 last counted in 2009.

- W. Loockerman Street is also a two lane roadway in the downtown area with several marked on-street parking spaces and a double yellow centerline to separate opposing traffic. At some of the intersections, chokers, a traffic calming device, are installed at both ends of sections of on-street parking spaces. Parking restriction signs and/or painted yellow curb is installed in locations where parking is not allowed. There are no separate turn lanes within the area to separate left turning traffic including the intersection of S. Governors Avenue. The speed limit is 25 mph and the road is classified as a minor arterial. The 2011 roadway AADT is 8,710 between Forest Street and S. Governors Avenue last counted in 2003 and 8,026 between S. Governors Avenue and State Street last counted in 2009.

- Some of the following local entities located directly off of S. Governors Avenue north of W. Loockerman Street to the first four legged intersection at Reed Street include: a couple of residential homes, the Dover Fire Department, Kunkel Auto Supplies, Harry Louie Dry Cleaning, King of Kings Church, City of Dover parking lots, on-street parking spaces as well as other local businesses.

- Some of the following local entities located directly off of S. Governors Avenue south of W. Loockerman Street to the first four legged intersection at North Street include: Delaware Tire incorporated, the Zimmerman multi-use building, and on-street parking spaces.

- The signalized intersection operates by allowing left turning traffic on S. Governors Avenue an exclusive left turning phase (displayed by a green arrow) followed by a permissive left turn phase (displayed by a green ball) where northbound and southbound traffic is allowed to go. Two five-section signal heads are displayed on mast arms in both approaches. Also in the southbound direction, there are two sets of Left ONLY/Shared Through/Right advance intersection lane control signs prior to the signal. On W. Loockerman Street, there are three section signal heads displayed on the mast arms allowing for permissive left turning traffic. There are stop lines installed on all four approaches of the intersection and they are in faded condition. There are pedestrian signals for all four approaches of the intersection, which are supplemented by crosswalks, which are also in a faded condition. The pedestrian signals do not have ‘countdown displays’ warning the pedestrian on how much time

they have left to cross the roadway. Pedestrians crossing both West Loockerman Street approaches do so during the green phase for through vehicular traffic on S. Governors Avenue. Pedestrians crossing the S. Governors Avenue approaches do so during the green phase for W. Loockerman vehicular traffic. During all peak hours (am, midday, and pm), the signal operates with a 75 second cycle length.

- The field review took place during the midday peak hour (12:00 pm- 1:00 pm) the following was observed at the signalized intersection:

Eastbound Loockerman Street

(i) In some instances, only two or three motorists go during the green phase partially due to the short cycle length
(ii) Some motorists crossed/turned left at the intersection during the yellow phase
(iii) One left turning motorist almost got into collision with a through vehicle in the westbound direction
(iv) One motorist appeared to give up making a left turn at the S. Governors Avenue intersection and headed west to the next signalized intersection at New Street.
(v) When there is a motorist in the westbound direction also making a left turn, there is no issue with making a left turn in the eastbound direction.
(vi) There were no issues for motorists making right turns

Westbound Loockerman Street

(i) The left turning volume was heavier in this direction compared to the eastbound direction
(ii) Few motorists go during the green phase partially due to the short cycle length
(iii) Some motorists crossed/turned left at the intersection during the yellow phase
(iv) There were four instances of vehicles running the red light (left turning and through traffic) given the amount of time it took to either turn left or wait for another vehicle to turn left
(v) Some motorists attempted to go around left turning motorists, who pulled into the intersection to make the movement
(vi) One left turning motorist almost got into collision with a through vehicle in the westbound direction
(vii) One aggressive left turning motorist turned ahead of the through queue

(viii) When there is a motorist in the eastbound direction also making a left turn, there is no issue with making a left turn in the westbound direction.

(ix) There were no issues for motorists making right turns

Eight Hour Traffic Counts on Tuesday, April 9, 2013 and Wednesday, April 10, 2013

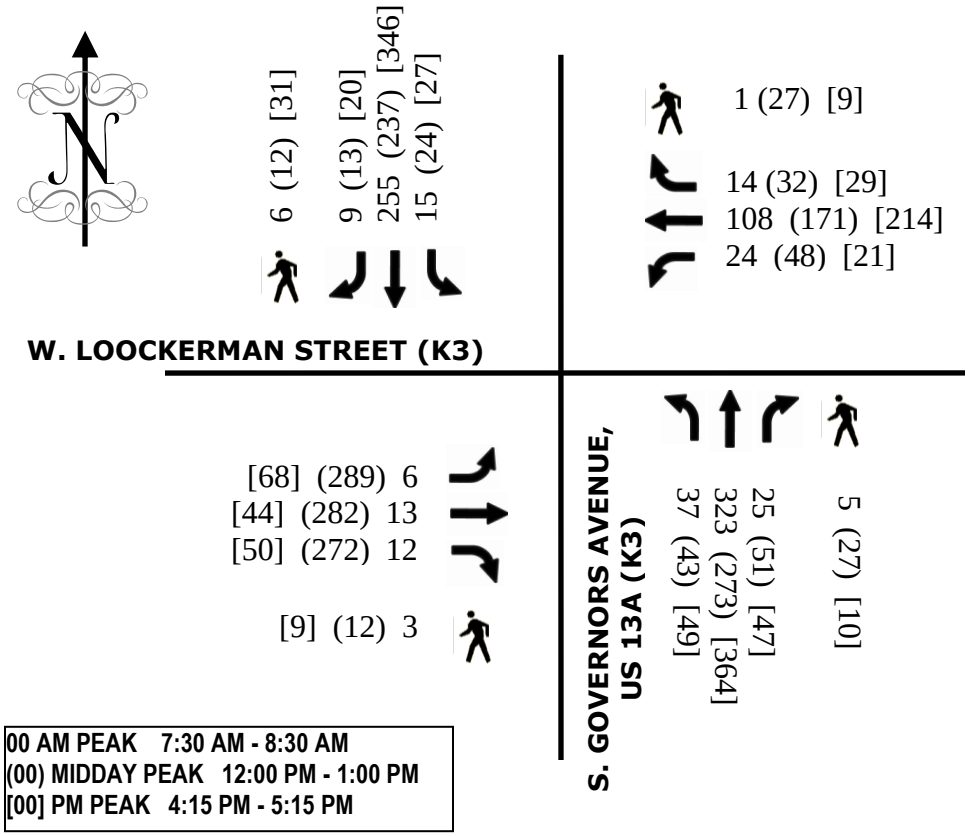
- Traffic counts at the intersection were taken between 2:00 pm- 6:00 pm on Tuesday, April 9, 2013 and between 7:00 am- 9:00 am and 11:00 am- 1:00 pm on Wednesday, April 10, 2013. The AM peak hour occurred between 7:30 am- 8:30 am; the midday peak hour occurred between 12:00 pm- 1:00 pm; and the PM peak hour occurred between 4:15 pm- 5:15 pm. The pm peak hour had the highest vehicular volume with 1451 vehicles including bikes. Bikes made up 31 vehicles in the counts.

- Pedestrians were also included the eight hour traffic count. There were 403 pedestrians counted using the crosswalks at the intersection.

- During the count, there were 96 vehicles turning left from eastbound W. Loockerman Street onto northbound S. Governors Avenue. There were 236 left turning vehicles from westbound W. Loockerman Street onto southbound S. Governors Avenue. The majority of the left turning traffic on W. Loockerman Street came from the westbound direction. Westbound left turns made up approximately 8% of traffic during the pm peak hour when vehicular volumes were highest. In contrast, they make up approximately 16% of traffic during the am peak hour, which is the lowest volume peak hour. The peak hour diagram follows on the next page.

- Observations were made during the traffic count from 7 am- 9 am, 11:30 am- 12:30 pm, and 2 pm- 6 pm to determine how long it took for motorists in both directions of W. Loockerman to make a left turn. Out of the 90 observations during the green phase on W. Loockerman Street where there were left turning vehicles, there were 42 instances were 53 left turning motorists ran the red signal; the majority of the red light running took place in the westbound direction (88%). The minimum delay for a left turning vehicle that ran the red light was 15 seconds. There were also 6 instances where 7 left turning motorists missed the green phase completely. All of these occurred in the westbound direction. The minimum delay for a left turning that missed the green light was 60 seconds. A chart with the observations for the left turning traffic on W. Loockerman Street is at the end of this report.

PEAK HOUR VOLUMES FOR S. GOVENERNORS AVENUE, US 13A (K3) AND W. LOOCKERMAN STREET (K3)



Crash Data

- Crash data pulled 0.02-mile of the S. Governors Avenue and W. Loockerman Street intersection revealed that there have been 6 reportable crashes within three years between April 4, 2010 and April 4, 2013. None of the crashes involved a motorist attempting a left turn at the intersection. Three crashes involved right turns at the intersection. One crash involved a motorist leaving an on-street parking space. Another car involved a motorist who sideswiped a parked car. The last crash involved a motorist who ran a red light. The collision diagram and spreadsheet is located at the end of this report.

Highway Capacity Software (HCS+)

- The HCS+ Signals computer program was used to determine the capacity of the signalized intersection at S. Governors Avenue and W. Loockerman Street. The Signals program determines many factors including the level of service for the lane

group (i.e. left turn lane, shared through/right lane), approach (i.e. southbound S. Governors Avenue), and overall intersection. The delay, in seconds, is also calculated for each approach and overall intersection. The 95th percentile queue lengths were also reviewed for this study to determine if there is any improvement in restricting left turns on eastbound and westbound W. Loockerman Street. Two scenarios- the existing scenario and the proposed scenario without left turning traffic from W. Loockerman Street- were ran during the AM, midday, and PM peak hour using the vehicular and pedestrian volumes collected, current cycle length of 75 seconds during all three peak hours, existing lane configurations etc.

- During the AM and PM peak hours, the results showed that the overall intersection operates with low delay in both scenarios given that the delay is approximately 29 seconds in both scenarios. The delay is approximately 22 seconds during the midday peak hour. This results in a level of service of C during the peak hours.

- There was slight improvement for both W. Loockerman Street approaches when left turning traffic was restricted during all peak hours. There was a bigger improvement seen in the westbound direction which has the higher left turning volume. During the midday and PM peak hours, the lane group and approach level of service improved from a C to a B while remaining a B during the AM peak hour. The approach delay was also reduced by approximately 2 seconds during the midday and PM peak hours and by almost a second in the AM peak hour. In the eastbound direction, while the lane group and approach LOS remained a C in both scenarios, the approach delay slightly improved when left turning traffic was not allowed.

- The 95th percentile queue slightly improved for both approaches of W. Loockerman Street when left turns were not allowed. However, the 95th percentile queue in the eastbound direction will continue to be longer than the storage distance between the S. Governors Avenue and New Street signals resulting in continued congestion along W. Loockerman Street. The biggest improvement was seen in the westbound direction during the midday peak hour when the queue length was reduced from 280’ to 212.5’ which means that the storage goes from almost being completely occupied to having some additional storage to the S. Bradford Street intersection. Congestion in the westbound direction will be more noticeably improved since the 95th percentile queues are shown not to spill over into the adjacent intersection of S. Bradford Street like it is shown to do in the existing condition during the PM peak hour.

- Following on the next page is a table with the HCS + Signals capacity results on the W. Loockerman Street approaches. The results underlined and shown in red is the best result between the existing and No Left Turns scenario. The HCS+ Signals capacity results for the entire intersection is located at the end of this report.

Peak Hour Intersection HCS+ Signals Capacity Results- Eastbound W. Loockerman Street (K23)								
	Lane Group LOS/Approach LOS		Approach Delay (sec/veh)		Intersection Delay (sec/veh)		Intersection LOS	
Peak Hour	**Existing**	**No Lefts**	**Existing**	**No Lefts**	**Existing**	**No Lefts**	**Existing**	**No Lefts**
AM	C	C	25.8	24.7	28.9	28.7	C	C
midday	C	C	22.2	21.2	22.6	22.0	C	C
PM	C	C	22.7	21.3	29.5	29.1	C	C

Peak Hour Intersection HCS+ Signals Capacity Results- Westbound W. Loockerman Street (K23)								
	Lane Group LOS/Approach LOS		Approach Delay (sec/veh)		Intersection Delay (sec/veh)		Intersection LOS	
Peak Hour	**Existing**	**No Lefts**	**Existing**	**No Lefts**	**Existing**	**No Lefts**	**Existing**	**No Lefts**
AM	B	B	18.1	17.3	28.9	28.7	C	C
midday	C	B	21.2	18.6	22.6	22.0	C	C
PM	C	B	21.7	19.3	29.5	29.1	C	C

Peak Hour Intersection HCS+ Signals Capacity Results- 95th Percentile Back of Queue Results for W. Loockerman Street (K23)				
	EB Approach (# of veh/ft)		WB Approach (# of veh/ft)	
Peak Hour	**Existing**	**No Lefts**	**Existing**	**No Lefts**
AM	16.9/422.5’	16.2/405’	6.6/165’	5.4/135’
midday	13.9/347.5’	13.0/325’	11.2/280’	8.5/212.5’
PM	14.1/352.5’	13.0/325’	12.3/307.5’	10.0/250’

CONCLUSIONS AND RECOMMENDATIONS:

The Department has determined that restricting the left turns from W. Loockerman Street onto South Governors Avenue would provide some level of improvement to the traffic operations at the signalized intersection. The level of improvement would be minimal (i.e. delay and 95th percentile queue length) according to the capacity results but there are some measurable impacts that would result from a left turn restriction, with motorist compliance, such as:

- The elimination of left turning and eastbound and/or westbound W. Loockerman Street through motorists running the red light due to the amount of time a left turning motorist takes to make their turn

- The elimination of left turning traffic on W. Loockerman Street missing the green light while trying to make a left turn against oncoming traffic

- The end of probable operational issues at the intersection such as vehicles bypassing a left turning vehicle on the right in a downtown area and near miss angle crashes between left turning vehicles and oncoming traffic

- Traffic on W. Loockerman Street could potentially use other east/west routes, which has less oncoming traffic or left turn bays (i.e. SR 8) to make left turn maneuvers.

These operational improvements with the left turn restriction could potentially reduce the overall delay along W. Loockerman Street as well as the queue along both approaches above what is projected from the HCS+ Signals capacity results. However, the City of Dover will need to weigh the following before ultimately determining if a left turn restriction should be installed:

- The same issues could occur at another intersection along W. Loockerman Street if a motorist attempts to make a left turn at another intersection east or west of S. Governors Avenue. An intersection such as New Street (located west of this intersection) would have approximately the same amount of oncoming traffic and no left turn lanes are provided.

- This intersection is located in the central business district area in downtown Dover which would be directly affected by a left turn lane restriction on W. Loockerman Street. There are several businesses and other attractions along S. Governors Avenue such as the Harry Louie Dry Cleaners, Dover Fire Department, King of Kings Church, and City of Dover permitted parking lots/on-street parking spaces to the north of W. Loockerman Street. Delaware Tire Center and a couple of on-street parking spaces are also located to the south of the intersection. The travel time and/or travel distance to reach these and other locations may increase for a motorist depending on their point of origin east or west of the W. Loockerman Street and S. Governors Avenue intersection.

As noted in the original request, the City of Dover should contact the local business community to get their feedback before it is decided if a left turn restriction is installed on both approaches W. Loockerman Street. The appropriate locations to install the Left Turn Restriction signs will have to be determined so that the sign is visible to motorists. This may be an issue given the amount of ‘street furniture’ located at the intersection (i.e. trees, light posts, signal equipment, face of buildings).

MEMORANDUM

Department of Planning & Inspections
P.O. Box 475
Dover, Delaware 19903
Phone: 302.736.7196 Fax: 302.736.4217

Date: July 16, 2013

To: Safety Advisory and Transportation Committee

From: Ann Marie Townshend, AICP

RE: Firefly Music Festival Post Event Report – Department of Planning and Inspections/Emergency Management

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From June 20 through June 23, 2013, Dover International Speedway hosted the second Firefly Music Festival. Red Frog Entertainment and Dover International Speedway have agreed to continue the event for ten more years according to the reports in the media. This report is offered as a summary of the Department of Planning and Inspections' planning and operations related to the event and to help identify areas where we need to improve in future years. The report is divided into topical areas, including Life Safety and Emergency Management, Zoning and Permitting, Licensing, and Costs and Revenues.

Life Safety and Emergency Management

Preparation for the event was started about three months prior on the city side with the Fire Marshal's Office, Emergency Management and Planning and Inspections Department.

Dover Downs submitted a site plan and information binder showing the location of stages and tents with a Special Event Permit application in late May. This book had all the specifications for the stages and the occupant loads of the tents. The binder and site plan were reviewed for life safety by the Fire Marshal and Emergency Management personnel for the city. Some of this year's events associated with the Festival were in the unincorporated Kent County, and the State Fire Marshal received the same information and they reviewed it as well. Dover International Speedway, State Fire Marshal, City Fire Marshal, and City Emergency Management staff performed drive through/walk through checks as well as stage checks the day before the event started, Thursday June 20, 2013. Assembly inspections on stages were not performed by City staff, but were overseen under the authority and management of Dover International Speedway and Red Frog. The information binder included the stage specifications and engineering reports. Due to weather and other factors, changes were made to the site plan the day before the event as they were still trying to get set up complete.

Fire Marshals started setting up for the event on Thursday afternoon and worked Thursday evening as some of the people started to arrive for the event. Twice each day there was a briefing held at the JOC (Joint Operations Center) that the Emergency Management Coordinator would attend and update the Fire Marshals following each JOC briefing.

Friday was the main day when all the festival goers started to arrive. Friday morning and afternoon were spent with Fire Marshals and Emergency Management checking the camping areas to ensure the proper parking of vehicles and

tents, access to fire protection, and proper permits for camping areas. They monitored parking lots that had not been approved for camping to ensure that people were not pitching tents, having open fires, or using grills.

On Saturday morning from 8:00 a.m. – 12:00 p.m., Fire Marshals checked the camping areas to ensure nothing had changed overnight and that no new unpermitted camping was taking place. Fire Marshals returned at 6:00 p.m. and rechecked the camping areas. Fire Marshals checked occupant loads within tents in the event area.

Zoning and Permitting

When originally approached by Dover International Speedway approximately two years ago to inquire as to whether a music festival would be allowed, the City Planner did not find any permissions or prohibitions regarding the temporary use in the *Zoning Ordinance*. The Planner responded that because it was a temporary use and not expressly prohibited, we could permit it as a special event. After the first year of the event, staff began to discuss the need to address the use in the *Zoning Ordinance*, as the festival was larger than staff had initially anticipated. We also discussed other areas that we needed to improve, specifically related to licensing and life safety. These items became a priority over zoning in planning for the second festival.

In February 2013, the City Planner met with Gregg Moore of Becker Morgan and Jerry Dunning of Dover International Speedway to discuss their plan for temporary gravel roads and other site issues associated with Firefly Festival. Based on the information shared, the City Planner indicated that due to the temporary nature of the improvements and because it did not appear that they were adding impervious cover that would trigger a Planning Commission review, that we would accept what was agreed to by the Kent Conservation District. The Planning Office received approved Sediment and Stormwater Plans from the Kent Conservation District in late April. The approved plan included wetland impacts and tree clearing that had not been previously part of the discussions with the Planning Office.

As spring approached, the Department of Planning and Inspections began to hear about the expectations of growth associated with the festival. Given that there had been some confusion of licensing issues during the first year of the festival, our staff scheduled a meeting with Dover International Speedway to discuss the plans for the event and to agree on how certain aspects would be handled. We attempted to get a handle on what to expect for camping areas off of the Dover International Speedway property, but it was difficult to plan based on the information available.

In May, the Department of Planning and Inspections issued a fence permit for a perimeter fence that was constructed prior to application for a fence permit. We also made contact with Dover International Speedway regarding portable buildings that were being placed throughout the event site without permits. There was discussion between City staff and Speedway staff regarding the need for these permits but they were not obtained.

The City applied the provisions of the *Zoning Ordinance*, Article 6, Section 5.5 Parking for Motorsports Racing to parking and camping areas, as there are no other provisions in the code for camping within the City. The challenges with applying this section are that it is specifically written for motorsports events, and it specifically references recreational vehicles and not tents. An amendment to appropriately expand this section of the *Zoning Ordinance* will be developed by staff in the coming months.

Similarly, the Sign Regulations (*Zoning Ordinance*, Article 5, Section 4) relax requirements for temporary signage associated with motorsports events. Many temporary signs were erected without permits, and some businesses obtained temporary sign permits. An amendment to the *Zoning Ordinance* is needed to address temporary signage associated with special events, and not limit this to motorsports. This ordinance must be carefully crafted to ensure that it does not over-relax regulations on temporary signage.

Additionally, staff will need to work on amendments to the *Zoning Ordinance* to address the use (likely through adding a "Special Events" section in Article 5 Supplementary Regulations and determine what level of review improvements for the event will require, as the improvements are no longer temporary in nature and the site improvements are taking place in a piece meal fashion, which when viewed cumulatively require a more formal level of review to comply with zoning requirements.

Business Licensing

The Department of Planning and Inspections worked with Dover International Speedway to determine how best to license vendors for the event. We determined that Itinerant Merchant licenses would be issued for event vendors. For any vendor, one license was required for inside the concert venue, regardless of the number of locations within the venue, and an additional license was required for locations outside the venue. ATM permits were issued for ATM machines within the venue, and a number of licenses were issued to companies associated with various aspects of event operations and logistics. The Department set up the damage assessment trailer as a licensing trailer in front of Pugh's Auto Repair on Leipsic Road. This location worked well, but because it was the first time being set up at that location there was not a lot of traffic. Staff wants to work more closely with Red Frog to issue licenses in advance of the event in future years. On Friday, the licensing staff road through the venue with Red Frog staff to determine a count of licenses needed. Some of these licenses were billed to Red Frog following the event and have not yet been paid.

Staffing, Costs and Revenues

Much of the Department of Planning and Inspections staff time associated Firefly planning and operations was accommodated within the normal work day; however, there are some functions that are necessary to perform outside of regular working hours, resulting in either comp time or overtime. Department managers worked to allocate staff in a manner that minimized use of comp time and overtime. Below is a summary of comp time and overtime hours and costs associated with the event. Other costs have not been tracked and are easily absorbed within operational budgets.

Functional Area	CT/OT Hours	Comp Time Cost	Overtime Cost	Total CT/OT Cost
Licensing	16.5	$ 181.72	$ 85.10	$ 266.82
Fire Marshal	62.5	$ 546.43	$ 1,345.08	$ 1,891.51
Emergency Management	35	$ 1,363.72	$ -	$ 1,363.72
Total	**114**			**$ 3,522.05**

The City issued 81 itinerant merchant licenses associated with the event, 11 camping permits, and 49 business licenses for ATM's. The following is a breakdown of revenue associated with the event:

Revenue Source	Total Amount	Total Collected	Total Outstanding
Fence Permit	$ 546.00	$ 546.00	$ -
Special Event Permit	$ 25.00	$ 25.00	$ -
Camper Parking Permits	$ 825.00	$ 525.00	$ 300.00
Vendor Licenses	$ 3,361.50	$ 1,701.50	$ 1,660.00
Trailer Placement Permits	$ 1,260.00	$ -	$ 1,260.00
ATM Licenses	$ 2,474.50	$ -	$ 2,474.50
Total	**$ 8,492.00**	**$ 2,797.50**	**$ 5,694.50**

In addition, Red Frog Entertainment did not obtain a business license because their business license from the previous year was still valid through the end of June. The renewal of this license would have been $188 and will be applicable next year. Of the revenue reported above, the $1,260 for Trailer Placement permits (fee was $630 but was doubled because permits were not obtained prior to installation), $1,660 for vendor licenses, $300 for camping permits, and $2,474.50 for ATM licenses are still outstanding, awaiting payment from Red Frog and Dover International Speedway.

Recommended Improvements for Future Years

1. Several amendments to the *Zoning Ordinance* are necessary to ensure compliance with the *Zoning Ordinance* for future years of the festival.
    a. The Special Event Permit needs to be codified, including the procedure for approval. This could be added to the Supplementary Regulations (Article 5) and written in a way that allows certain "Temporary Activities." In addition to clarifying that the festival would be permitted under zoning, it would also lay out a clear process to avoid confusion on the part of those holding the event. Kent County has provisions for Temporary Activities which could be reviewed in establishing something within the City.
    b. The Motorsports Parking section of the *Zoning Ordinance* in Article 6 needs to be updated to address non-motorsports events and expanded to address tent camping.
    c. The Sign Regulations need to address the temporary signage associate with an event such as Firefly. This may be able to be incorporated in the Special Event Permit section previously referenced.
    d. Trailer Placement Permits need to be more clearly addressed in the *Zoning Ordinance* and other sections of the code.
2. Improved coordination and communication is necessary between the Department of Planning and Inspections, Dover International Speedway, and Red Frog. The Department needs to work directly with Red Frog on some of the permitting issues and ensure that Dover International Speedway is kept in that loop.
    a. As it relates to occupant load and structural specifications for the gathering areas (tents and stages), the Department of Planning and Inspections needs to come to an agreement with Dover International Speedway, documented in writing, of what role the City will play in inspecting these areas.
    b. Licensing staff will work more closely with Red Frog to issue vendor licenses prior to the event and perform a site visit, as happened this year. This will allow for more efficient use of staff during the event and avoid confusion over how licenses are issued.
3. If annexation of the remainder of Dover International Speedway property is not achieved within the next year, a memorandum of understanding to include the City of Dover, Kent County, State Fire Marshal's Office, and Delaware State Police is necessary to avoid duplication of services and/or jurisdictional confusion over the event, as the activities take place inside and outside City limits.