



# Appendix G

## Agritourism Mitigation Report

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**Monmouth County**

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# Introduction

Agritourism is one of the many fast-growing tourism sectors in Monmouth County, with several sites that attract large numbers of visitors from inside and outside of the County. A review of total activity at a major agritourism site from location-based services data shows that traffic increased by over 75% between 2018 and 2019. While most sites do not typically generate congestion on the roadway network, a few larger sites have high visitation weekends in the late spring, summer, and fall, which can result in short-term congestion on rural roadways that are not designed to accommodate heavier volumes. Congestion can sometimes spill over onto small country lanes as visitors using apps like Google and Waze are directed to these roadways to avoid congestion.

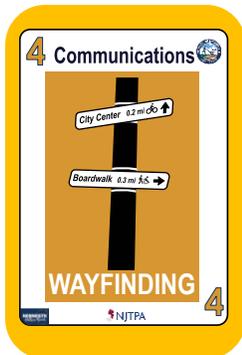
There are a number of transportation demand management (TDM) strategies that can address the issues identified in the Existing Conditions Report, improve visitor experience, and enhance quality of life for nearby residents. This purpose of this site-specific Mitigation Report is to identify TDM strategies that are currently in place, as well as provide recommendations for additional measures to address the existing issues identified above and improve the overall travel experience for visitors and nearby residents. The following sections outline the various strategies that can be applied on agritourism sites. Each TDM measure in the following sections is described briefly along with their ‘playing card’ and a backlit color:

|   |   |  |   |
|---|---|--|---|
|  | <p>A green backlit color indicates a TDM measure already in place</p> |  | <p>A yellow backlit color indicates a TDM measure recommended for consideration</p> |
|---|---|--|---|

The strategies are organized into five categories: Communications, Traveler Behavior, Improve Existing Travel Options, Parking, and New Options, and are presented as a deck of cards. There is no single strategy that can solve all the transportation issues, and just like a card game, multiple cards (strategies) are needed for a “winning hand” (reduction in event and tourism related traffic congestion). A detailed description of the strategies is contained in the following sections.

# 1 – Communications

## Signage and Wayfinding (AG 1.1)



Signs and wayfinding to agritourism sites would help reinforce visitors' travel routes and may be used to implement detours where possible. The sign plan should be deployed on peak attendance days, and it can be implemented using static or dynamic signs or fold-down signage. In many cases agritourism sites could work with local operating agencies to utilize existing VMS resources and/or assistance with the installation of wayfinding signs.

An example of potential wayfinding signs at an agritourism site is shown in **Figure 1**. Wayfinding can be used to direct drivers to the main entrance as well as discourage them from using local roadways that are not capable of handling high traffic volumes. When selecting locations for signage and wayfinding, the following process can be used:

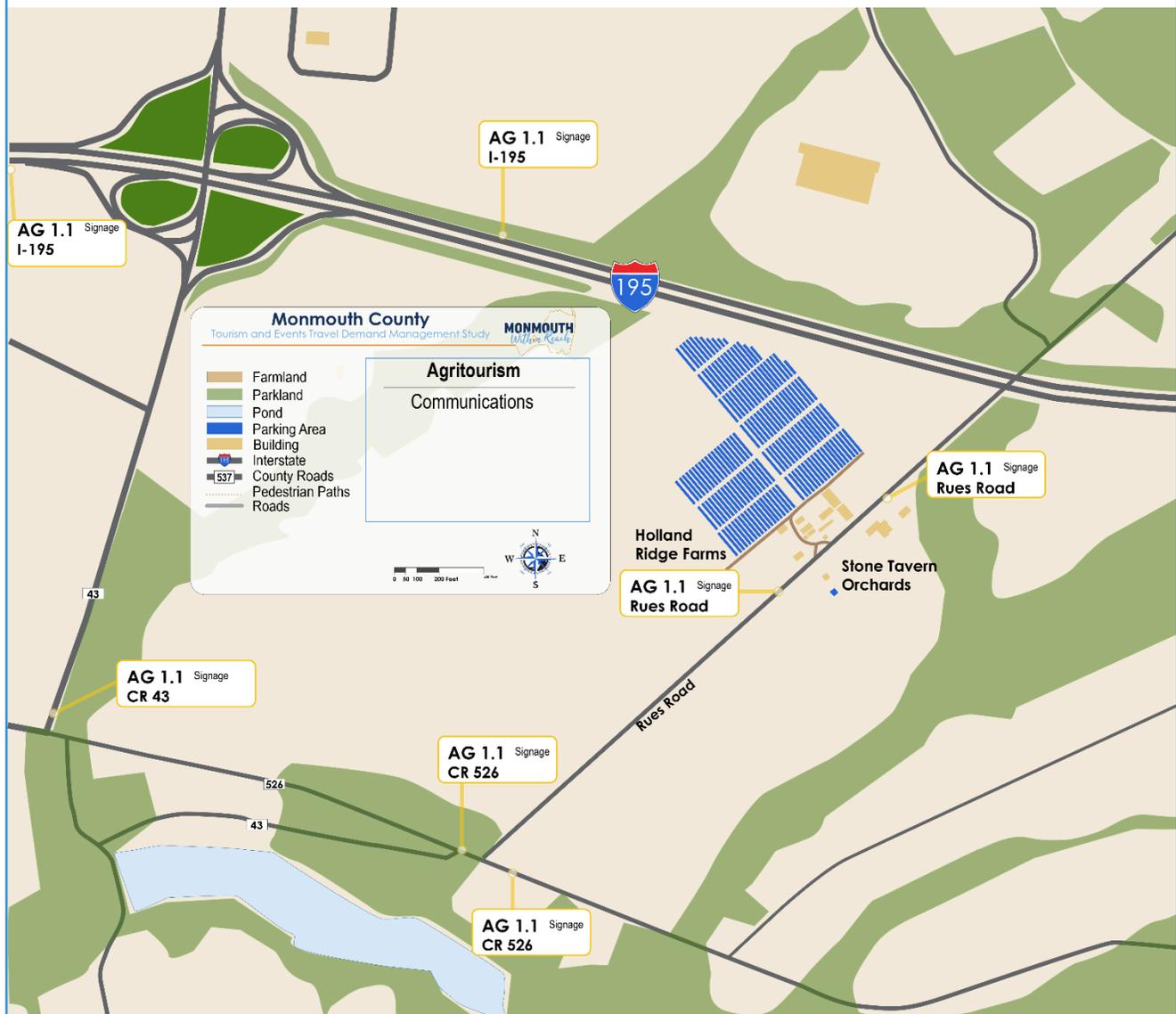
1. Identify current arrival and departure routes
2. Identify major exits from highways
3. Identify major turning movements – left turns or right turns off the arrival and departure routes
4. Inventory available dynamic and static signage in the area
5. Determine if there is an opportunity to change dynamic messaging to reflect the agritourism site (e.g., “EXIT 10 TO FARM”)
6. Identify suitable locations for fold-down signs, such as utility poles or streetlights
7. Conduct an analysis of the arrival and departure routes:
  - a. Do new visitors know how to get to the Site, following the signs?
  - b. Are there specific turns or exits that are not clearly signed?
  - c. Are the signs provided far enough in advance to allow drivers to react (for example, if the sign says to turn left, is there enough time for the driver to switch to the left lane, if necessary)?

In the example shown in **Figure 1**, a sign prior to the off-ramp from I-195 westbound to CR 43 and one on the eastbound side would help direct visitors to the farm and could provide information on how full parking is. A sign southbound on Rues Road south of the I-195 underpass could provide information into the farm as could one south of the farm in the northbound direction. Signage on CR 526 at the junction of CR 43 and one prior to Rues Road would help provide easy directions into the farm as would a sign indicating the turn southbound on CR 43 to CR 526.

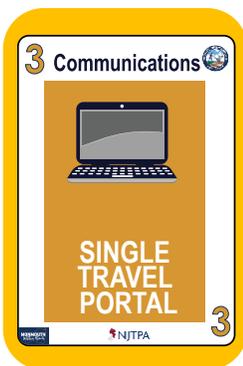
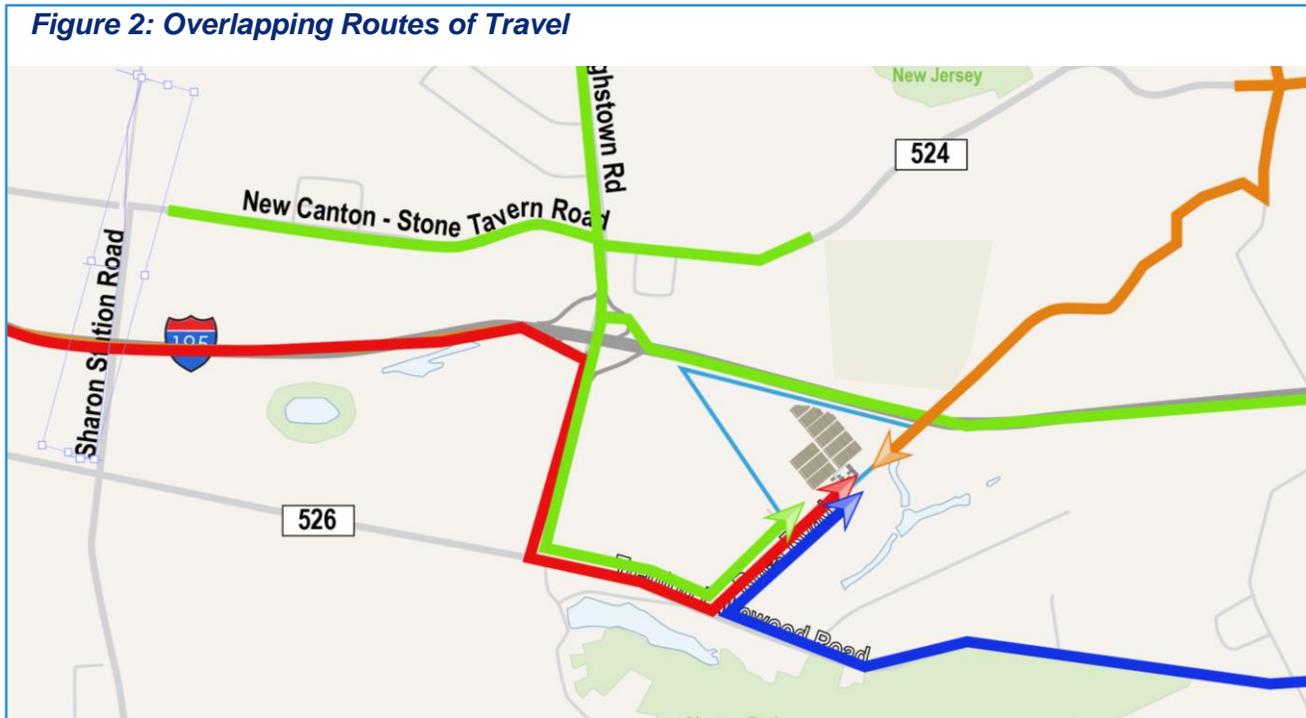
If there are significant overlaps in entering and exiting traffic, as shown in **Figure 2**, consideration could also be given to providing separate entry and exit signs to direct exiting vehicles to use an alternative route so as not to conflict with entering vehicles, or to restrict turning movements. Another option is to designate a rideshare entrance, which can also be purposed as a site exit, and a general

entrance. This would provide a way to monitor rideshare ingress (to a drop-off lot) and prevent further entry into the site.

**Figure 1: Example of Directional Signage**



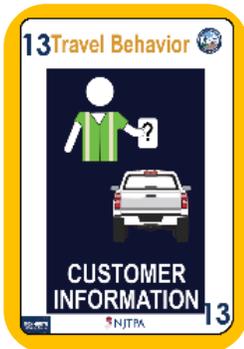
**Figure 2: Overlapping Routes of Travel**



### Directional Maps (AG 1.2)

Downloadable or online maps can be used to depict travel routes, parking locations, and other transportation-related information to visitors. These can be used to direct fans to alternative routes, which might be less congested, and may not be the "logical" routes or ones that are shown on navigation apps. Furthermore, they can be used to discourage travel on roadways that are not designed to accommodate large traffic volumes. For example, a map could be made that discourages drivers from using narrow rural roads that are not capable of safely accommodating event related volumes of two-way traffic.

## 2 – Travel Behavior



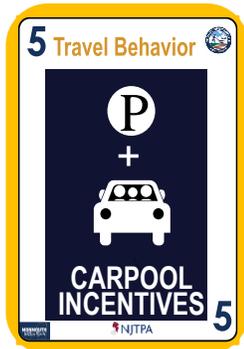
### Identify Peak Travel Times (AG 2.1)

A messaging system can make visitors aware of the best times to arrive, helping them avoid the most congested visitation periods. This can be distributed to an email or text message list, shared via social media, or posted on the destinations' website.



### Arrive Early/ Stay Late (AG 2.2)

Agritourism sites can implement incentives to encourage visitors to arrive early or stay late. If parking or entrance fees are charged, reduced or free parking/admission could be offered for visitors that arrive before a certain time. In addition, sites could partner with food trucks to provide breakfast or brunch before peak visitation periods, or dinner options that would encourage some visitors to stay late. Other options include providing entertainment, games and competitions, or special site access to visitors arriving or leaving at preferred times.



### Carpool Incentives (AG 2.3)

If admission fees are charged to events, sites could consider converting the admission fee from a per person charge to a per vehicle parking charge. This could encourage some visitors to carpool to reduce the overall admission fees. A portion of the parking fee could be credited back to the visitor for the purchase of farm goods or activities.

# 3 – Improve Existing Travel Options



## Off-Street Queuing (AG 3.1)

The parking management process can sometimes result in delays to vehicles entering an agritourism site, particularly on peak event weekends. Collecting parking or entry fees and directing vehicles to desired parking locations can slow vehicle entry and result in queuing on the adjacent roadways. Therefore, consideration should be given to providing additional queueing space by moving parking fee collection or other parking directions further into the interior of the location. An example is shown in **Figure 3**, below. In order to reduce the likelihood of queueing on CR 537, Eastmont Orchards has developed a circulation route that provides almost 1,800 feet (approximately 90 vehicles) of

queueing between the entry point from CR 537 to where traffic is directed to park. The circulation route is entirely on orchard property and includes signage along the route regarding where to park as well as orchard policies.

**Figure 3: Example of an Extended Entry Route that Provides a Queuing Area**





## Traffic Control (AG 3.2)

Large agritourism events can lead to a significant increase in traffic volume on the rural roadway around the site. Often, key intersections that are used to access the site are unsignalized because they do not experience daily traffic volumes that warrant a typical signal. However, during the event the unsignalized nature of the intersections may lead to substantial delays for entering and exiting vehicles because of temporary spikes in volume. Sites should evaluate pinch points and critical intersections around their location and work with the appropriate operating agency to try to mitigate these delays by procuring temporary traffic control such as traffic control officers or temporary traffic signals.

Temporary traffic signals mounted on trailers can be deployed relatively easily but are only appropriate if there are significant and sustained high volumes (**Figure 4** *Error! Reference source not found.*). Temporary traffic signals are currently only applied in the County for construction areas and have not been applied to intersection control related to events. Therefore, additional coordination with the County would be required to develop an approval process that would allow for the use of temporary traffic signals for intersection controls during events. Furthermore, cost may also be a concern for operators. Additional coordination with vendors may be needed to develop an adequate pricing plan. The County could also consider purchasing the temporary traffic signals to use for a variety of event types throughout the County.

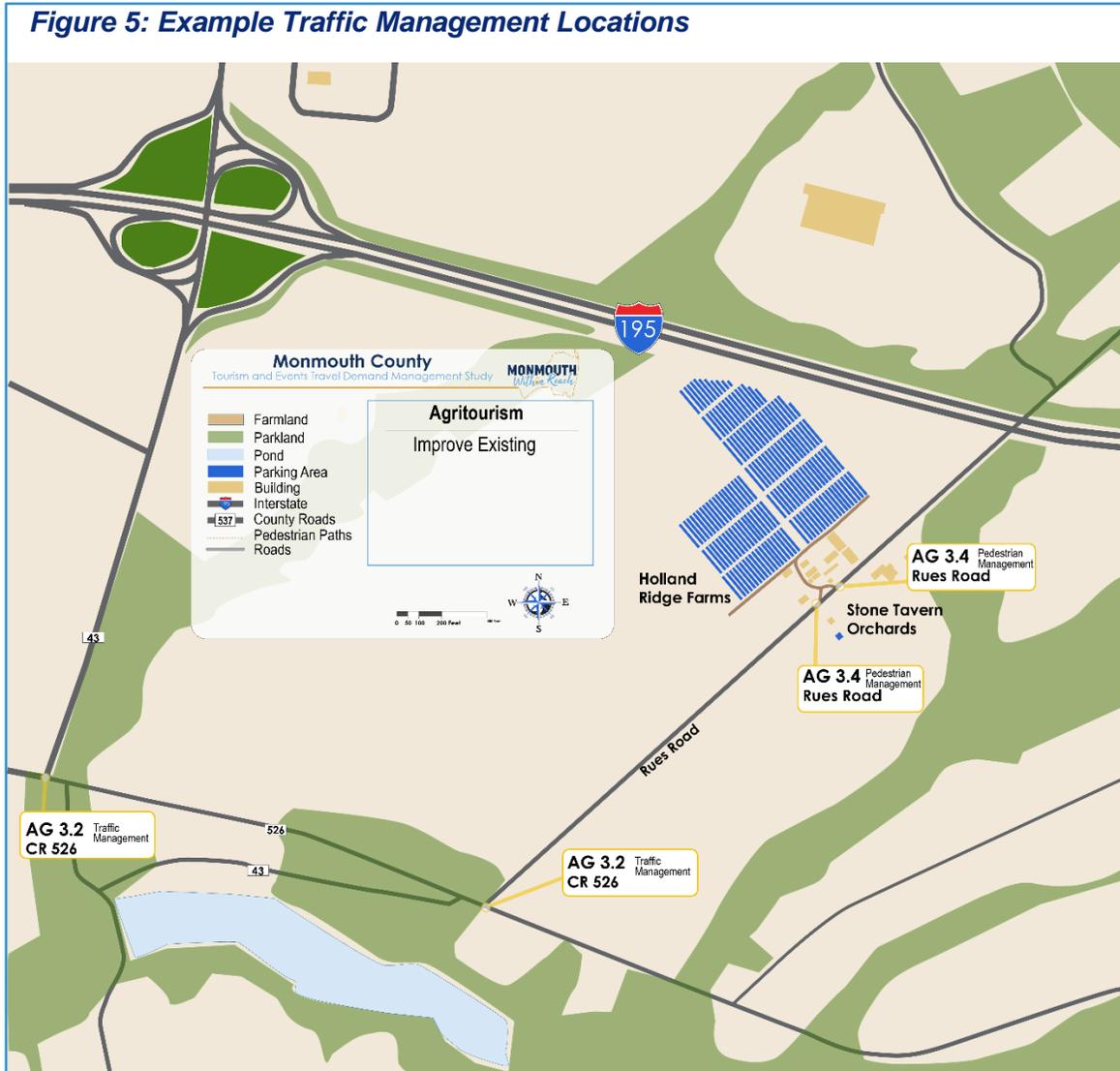
An example traffic control plan is shown in **Figure 5**. It shows the potential locations to stage traffic control personnel as well as the potential for temporary traffic signals at

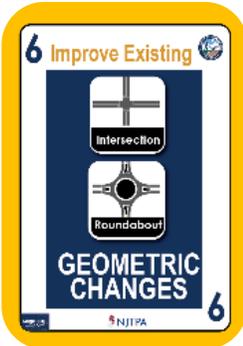


critical unsignalized intersections. Nearby locations that can be used for overflow parking should be identified on the signage plan, and traffic management personnel should be considered for those locations as well if warranted by the level of demand. If these locations require visitors to cross an active roadway, pedestrian management staff should also be assigned to the crossing locations to manage traffic flow and provide dedicated pedestrian crossing phases. The site operators can

evaluate the need for this type of solution based on their degree of overflow and the availability of parking spaces on a nearby site.

**Figure 5: Example Traffic Management Locations**





### Dedicated Entry and Exit Routes (AG 3.3)

Separating entry and exit routes can help to minimize delay for both entering and exiting vehicles. Selecting different roadways for entry and exit, if possible, can also further help spread peak event-related congestion over a longer period of time. However, it is important to ensure that proper wayfinding signs are provided at the exit point and at other nearby intersections to help drivers orient themselves and find their way to major travel routes. An example is shown in **Figure 6** for Eastmont Orchards.

**Figure 6: Separating Entry and Exit Points**



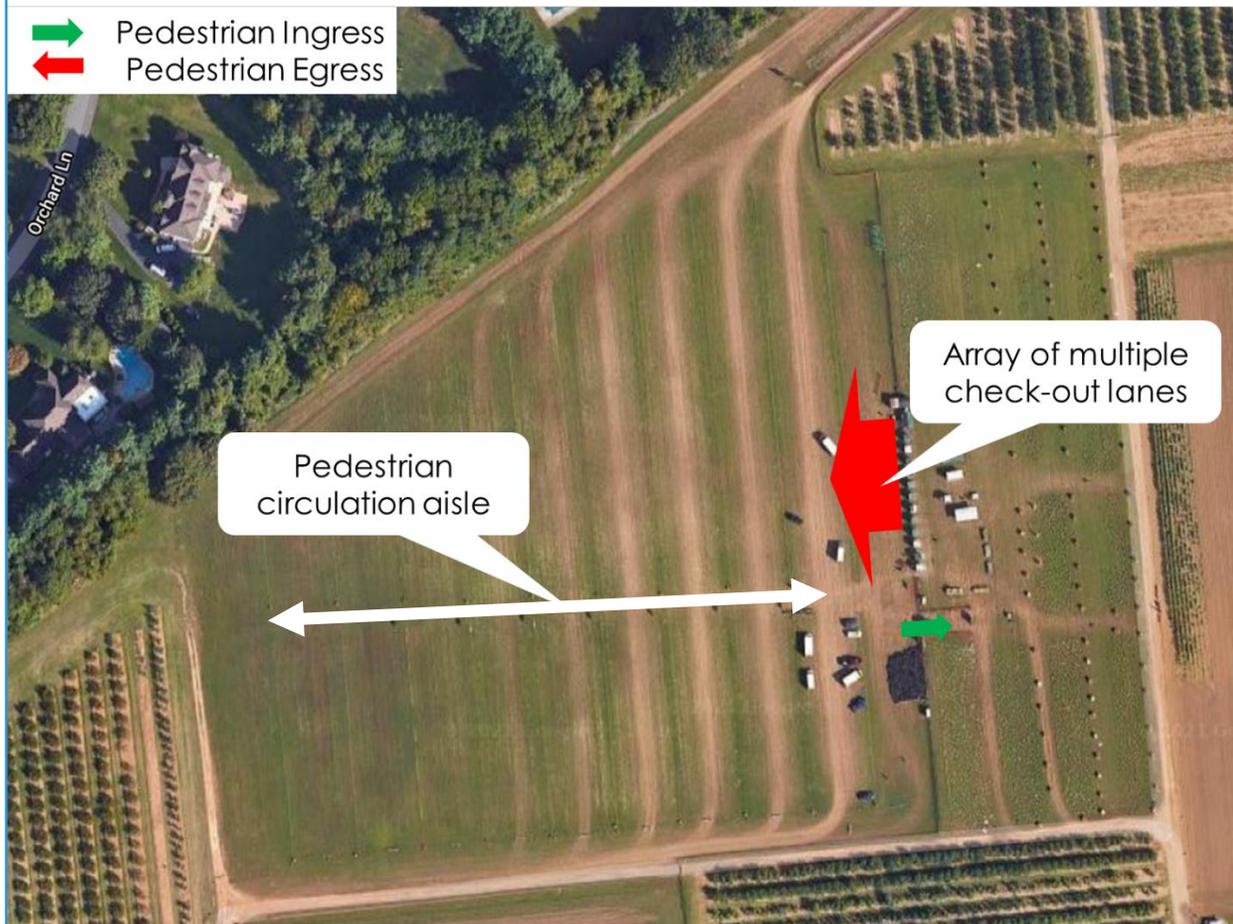


## Pedestrian Management (AG 3.4)

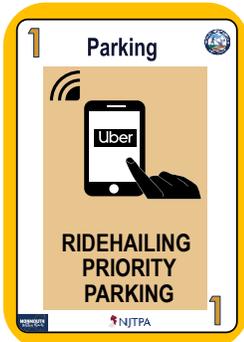
Managing pedestrian flow onsite, particularly between the parking areas and entry/exit points, is critical to providing a safe environment for visitors, especially those who are often accompanied by children and may not be fully focused on vehicle cross-traffic. Furthermore, main pedestrian flows crossing major entry or exit drive aisles can also have a significant negative impact on circulation and can cause additional delays onsite. An example is shown in **Figure 7**, which depicts an array of 12 checkout booths that are used to manage exit queues and has separate areas for pedestrian entry and exit. In addition, the heaviest

pedestrian movement can flow freely into the parking area without crossing a moving drive aisle. A pedestrian area is also designated through the parking lot to discourage pedestrians crossing between parked cars.

**Figure 7: Example of Pedestrian Management**



## 4 – Parking



### Ridehailing Area (AG 4.1)

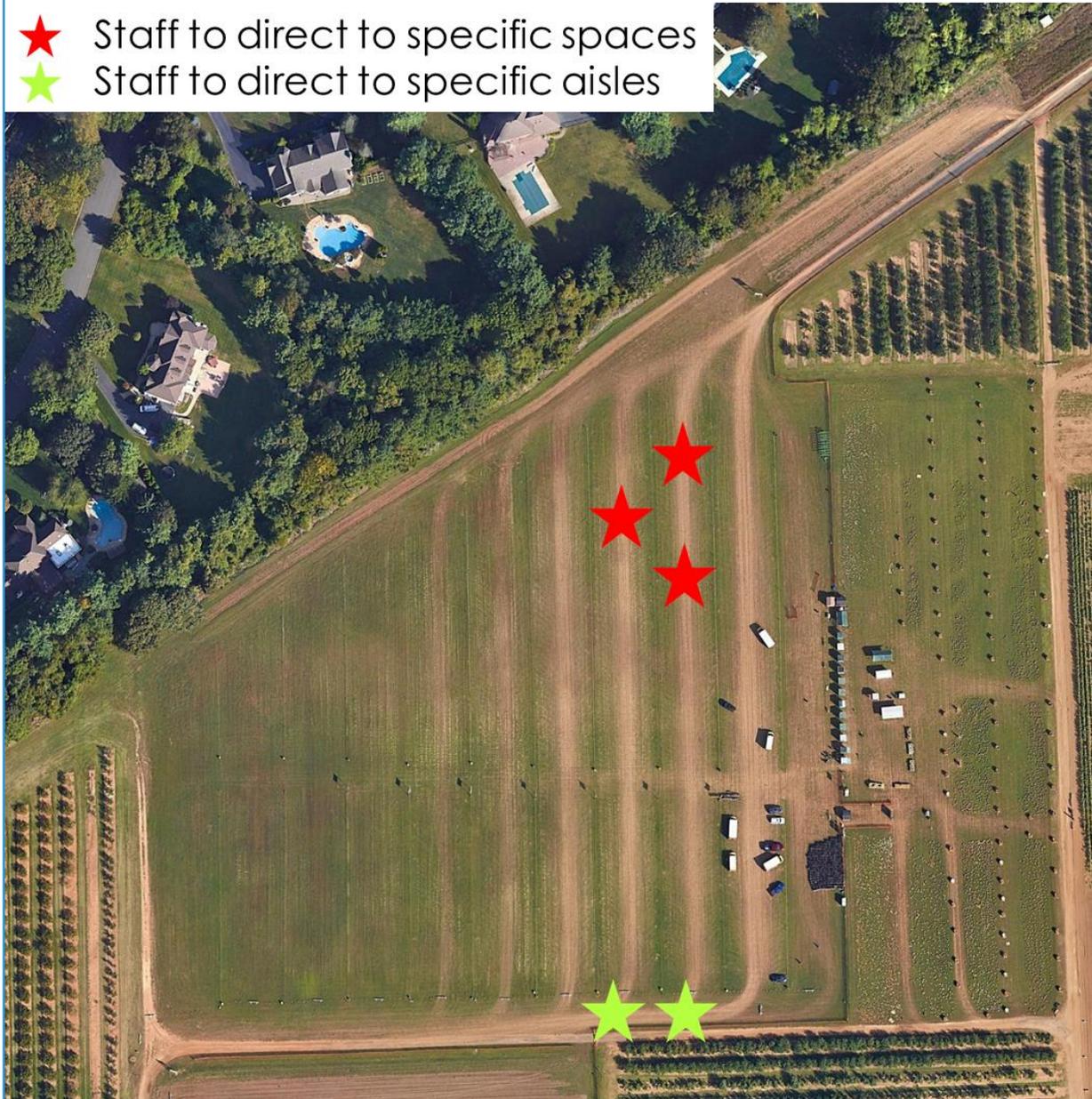
A designated ridehail area would make it easier for passengers and drivers to find each other and may also encourage more visitors to use ridehail on subsequent trips knowing that it will be available. This may be particularly valuable for sites, such as wineries, that may require ridehailing to help visitors travel safely from the site.



### Directed Parking (AG 4.2)

Utilizing parking management staff, visitors can be directed to specific drive aisles, and then to specific spaces within those drive aisles, leading to an efficient utilization of the parking area. Furthermore, it avoids vehicles circulating looking for open parking and ensures that vehicles are spaced appropriately to maximize parking supply. This process includes a sequence of parking management staff on the main entry drive aisle, and then in the active parking bays, which are filled one at a time (**Figure 8**). Eastmont Orchards has a dedicated team of directed parking staff that implement this type of parking strategy.

Figure 8: Example of Directed Parking at Eastmont Orchard





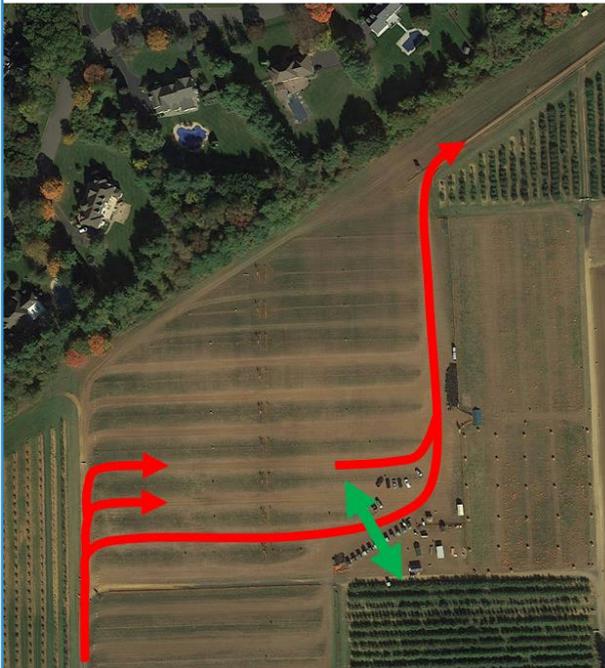
### Parking Orientation (AG 4.3)

The orientation of the parking relative to the entry points to the farm can have a significant impact on circulation through a parking area. Traffic flow on major drive aisles can be impacted by pedestrians crossing to access the farm entry point. Therefore, pedestrians should be separated from major vehicle flows in the parking area. Reorienting parking to streamline and separate vehicle and pedestrian flows can help improve entry processing rates and reduce driver and pedestrian frustrations. Eastmont Orchards recently reoriented their parking lot, resulting in improved pedestrian and vehicle flow. An example is shown in **Figure 9**, below. In the previous configuration, vehicles would conflict with pedestrians as they were entering or checking out, which would impede the flow of vehicles entering and access the parking areas. With the current configuration, the pedestrian-vehicle conflicts occur less frequently because the vehicle flows are spread out amongst many aisles, and the parking supply is also higher.

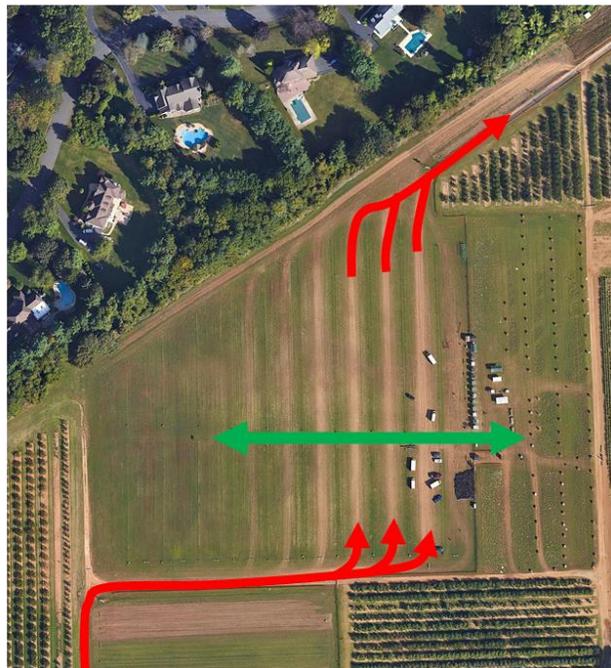
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**Figure 9: Example of Reorientation of Parking**

Previous Parking Configuration



Current Parking Configuration



Vehicular Flow  
 Pedestrian Flow

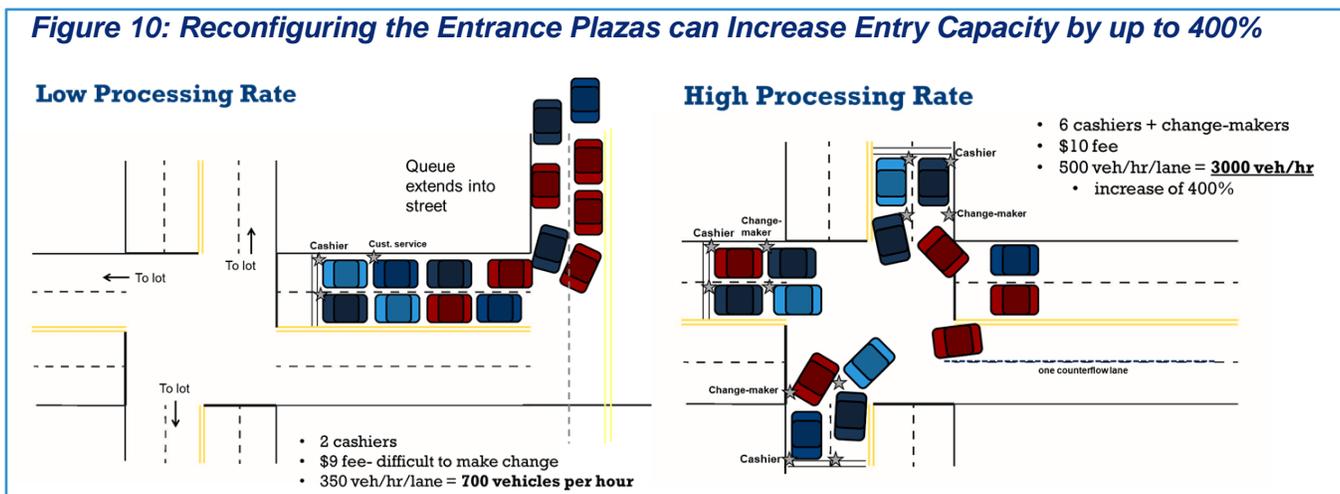


## Parking Entry Array and Change Makers (AG 4.4)

At locations where a parking fee is collected, the paypoints can be a source of traffic congestion. Visitors have to stop, communicate with the paypoint clerk, and then provide cash or a credit card. The entry capacity is based on the number of entry lanes and the time for each transaction. For example, at a site with two entry lanes and three transactions per minute, the entry capacity is 360 vehicles per hour. If the actual demand is higher than this, queues will result on the surrounding roadways. Options to increase the entry capacity include the use of change makers or a reconfigured parking entry checkpoint system. Both of these strategies can help improve ingress capacity and reduce queues on the

surrounding roadways. Change makers – or additional staff per lane to process vehicles in queues – can also help improve the ingress capacity, by making exact change for vehicles in queue behind the checkpoint. These staff can communicate with drivers, and help them make exact change, if necessary, while they are in queue, so that when they arrive at the paypoint, they can be processed much faster. Another option is to move the paypoints further into the lot, so that there is additional off-street queuing space. This also provides the ability to use multiple legs at an on-site intersection to create additional paypoints. The diagram in **Figure 10** shows options to increase entry capacity by up to 400%.

**Figure 10: Reconfiguring the Entrance Plazas can Increase Entry Capacity by up to 400%**



# 5 – New Options



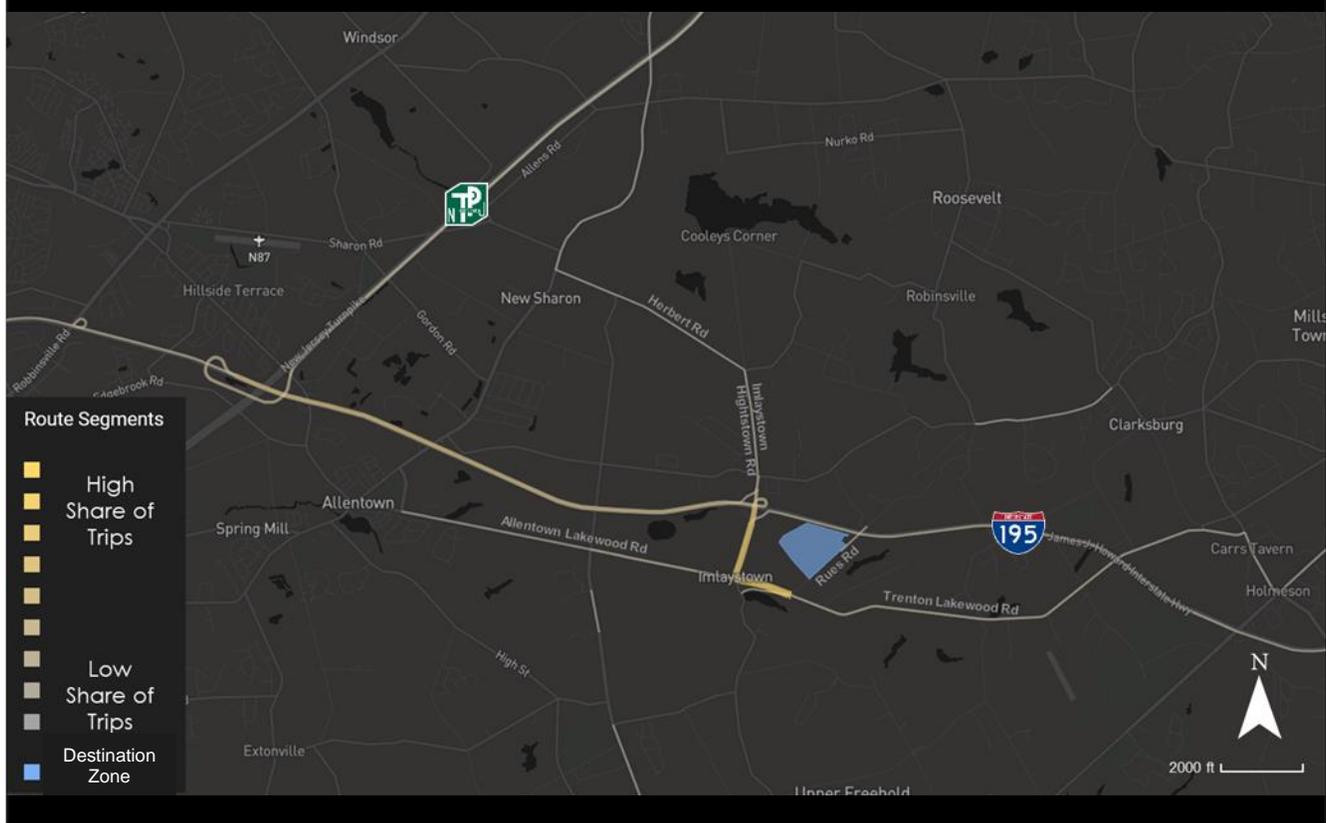
## Shuttle Buses (AG 5.1)

Shuttle buses from remote parking areas would provide additional parking capacity if a site approaches parking capacity on event days. These can be investigated near transit hubs, or school or office parking lots that are vacant on peak weekend visitation days. An off-site operation should also be supported by signage and a potential shuttle connection. When evaluating off-site options, site owners should consider the proximity of the off-site lot, the bus fleet size requirements, and the feasibility of diverting visitors to those off-site locations using signage.

below shows routes that visitors are using to access Holland Ridge Farms, one of the many agritourism sites in Monmouth County.

There are park and ride opportunities along I-95 (NJ Turnpike), the Garden State Parkway, and along US 9 that may be suitable for some agritourism sites.

**Figure 11: Roadways that Experience 5% or More of Traffic Destined to Holland Ridge Farms**



# Conclusions and Implementation

Agritourism represents a fast-growing tourism sector for Monmouth County. Many sites, such as Eastmont Orchards, have implemented strategies to improve the visitor travel experience. These strategies, such as traffic management, signage and wayfinding, parking management, and pedestrian management, reduce congestion on the approach and departure roadways, and make it easier for visitors to enter and exit the Site. Additional options such as park and ride facilities can be considered for sites that are located along major routes where bus service or park and ride facilities are located.

A summary implementation matrix is provided below which depicts each strategy based on its complexity to implement as well as its effectiveness (see **Figure 12**). The matrix can be used by decision makers to help select strategies to pursue as funding for or interest in certain strategies arise.

**Figure 12: Agritourism Implementation Matrix**

