



AGRICULTURAL FREIGHT TRANSPORTATION PLANNING PLAYBOOK

*A Guide for Wholesale Terminal Produce
Markets*

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Introduction

The transportation networks that connect terminal markets to agricultural regions play a vital role to supplying regional economies with fresh produce. An efficient transportation network can help support market operations by reducing traffic, vendor costs, and by more efficiently facilitating the intake and sales of produce.

This guide is intended to help terminal produce market managers understand the transportation planning process at various levels of government. It introduces how freight infrastructure is planned and built in the United States, and highlights opportunities for market managers to influence infrastructure decision-making. Understanding the public sector's timelines, resources, and planning processes will help market managers influence infrastructure investments to support their regional food hubs.

Organization of this Playbook:

- ***A basic overview of the transportation planning process***, including who is involved, common methods urban planners use to analyze transportation networks, and how investment decisions are made.
- ***Recommendations to terminal markets for navigating the transportation planning process***, including tips for defining your local transportation needs, determining if your local, regional, or state government has already planned near-term investments in your area, and how to advocate for additional improvements.
- ***A brief list of considerations*** to help your market efficiently and effectively collaborate with local, regional, and state officials to have your transportation needs heard.
- ***A list of additional resources*** to draw from when engaging in the planning process.

TABLE 1: When Might a Market Decide to Participate in the Transportation Planning Process?

When this happens...	A market might advocate for...
High levels of congestion at peak delivery times	A roadway study to determine if operational or capacity improvements could meaningfully improve travel conditions.
Poor roadway conditions that require truck drivers to drive extremely slowly to ensure fragile produce is not bruised or damaged	Prioritizing road maintenance on key corridors connecting the market to key interstate and delivery corridors.
Your market experiences significant, sustained growth and you begin thinking about expanding your facilities.	An analysis or study to be done examining whether future traffic will require additional roadway capacity to be expanded so that it can be programmed into future work plans in time for the expansion.
Residential and commercial buildings begin to pop up around the market's mostly industrial area, causing safety and congestion conflicts between produce trucks and pedestrians and other drivers	Stronger industrial zoning regulations and enforcement surrounding your market.



Transportation Planning

How is Transportation Infrastructure Planned and Built?

Transportation planning is the process governments use to identify transportation needs in an area and analyze potential solutions to address them. This includes both (1) anticipating future maintenance of existing infrastructure and (2) evaluating existing roadways for potential expansion, additional services, or new infrastructure or facilities.

Transportation planners analyze potential transportation projects in three main parts to help public agencies efficiently allocate and prioritize their infrastructure dollars, described in the figure below and further described in the following section.



Planning

- Set goals and determine what transportation is needed to move people and goods
- Write transportation plans that describe how an agency intends to achieve these goals



Engineering & Financing

- Choose routes and design infrastructure
- Forecast the money available for transportation from taxes, tolls, fares, and other sources
- Develop a list of projects to fund using the transportation plan's priorities and forecasted revenues



Construction & Maintenance

- Build and repair infrastructure and make any required purchases; complete work on schedule, within budget, and according to design
- Provide service, operate, and maintain transportation systems and infrastructure



Phase 1: Planning

The goal of the planning phase of a project is to define a future vision for how a transportation network will operate based on anticipated needs. It considers projected population growth, how people will travel to their jobs and other places, and current and projected future capacity of roads and other modes of transportation. Transportation plans also define a set of goals for the city or region being planned for public interests such as reducing carbon emissions, expanding options for transportation, increasing accessibility to jobs and other important amenities, etc. Public engagement is a core component of the planning process. The result is a transportation plan that serves as a roadmap and guidepost for public sector decision-making over a period of several years. Freight is often featured prominently in city, regional, and statewide transportation plans.

This guidebook primarily focuses on this step of the overall project lifecycle to help terminal markets participate in the planning process.



Phase 2: Engineering & Financing

Projects identified during the planning process still have a long way to go before they move to construction. Public sector engineers must next consider several alternative designs for the infrastructure project and select a preferred option based on feasibility, costs, and other considerations. Then final engineering drawings are created, specifications are developed and finalized, environmental studies and permits are secured, coordination with utilities and partner agencies continues, required right-of-way is acquired as needed, and a final cost estimate is created. Finally, construction contracts are put out to bid and moved through procurement to award.



Phase 3: Construction & Maintenance

The construction phase involves constructing the actual project. The design and construction teams meet, construction management roles and responsibilities are established, contractor approvals are secured, utility coordination occurs, a Notice to Proceed is issued, public engagement and notification continues, inspections in the field continue throughout the construction process, progress payments are generated through the completed construction of the project.



The Planning Process

Economic growth and supply chain efficiency for people and goods are highly influenced by how well the transportation system delivers mobility and access. Therefore, transportation planning is critical for the vision of states, regions, or communities to meet societal goals. It includes:

- Careful consideration of possible strategies;
- An evaluation process that contains diverse viewpoints;
- The collaborative participation of transportation agencies and organizations; and
- And open, timely, and meaningful public involvement from the general public, the business community, community groups, environmental organizations, and much more.

These functions all occur prior to infrastructure decisions or builds. Breaking down the planning process in more specific terms, it typically involves the following steps/processes, particularly when planning for infrastructure is involved:



Transportation Plan Development

A Long-Range Transportation Plan (LRTP) is federally required for states and regional planning organizations. This plan must forecast out 20 years and be updated regularly (every 4 to 5 years) with extensive public input. This plan serves as the blueprint for transportation in the region. The LRTP will define the vision, goals, and strategies associated with transportation in the region as well as identification of performance measures and performance targets. A transportation plan typically includes vision development, needs identification, and project prioritization.



Vision Development

Planning for the future is always challenging as the future is not certain. Beginning the planning process by developing a vision helps to guide decision making based on a shared vision for the future. The vision developed represents the desired outcome and will be strategic – incorporating general desire transportation features and functions without identifying precise details.

Figure 1: Planning Factors and Inputs



Wholesale Produce Market managers have opportunities to get involved in determining what capital projects advance in your region during many points of the planning process. Engaging with the Long Range Transportation Plan, needs identification, vision, and project prioritization as a part of the public engagement component of those steps, will provide an opportunity to discuss infrastructure or other transportation planning projects needed for continued operation of the market.

Source: Federal Highway Administration/Federal Transit Administration Transportation Planning Guidebook, 2017.



Needs Identification

In order to understand and identify future needs, jurisdictions begin by gathering and analyzing the current transportation system and conditions. This information is combined with existing and projected demographic, population, and travel patterns to understand what future needs might include. There is typically a public outreach component to a needs assessment as well, to identify from industry, businesses, and residents what they see as important for the future of transportation in the region. This exercise concludes with a summary of needs and recommended projects, policy, and infrastructure.



Evaluation & Project Prioritization

Inevitably, there are more infrastructure and other transportation projects needed than there is funding available for. Project prioritization helps to facilitate efficient use of limited funds. Jurisdictions have varying methods for how projects are prioritized, in general a prioritization tool is developed incorporating several factors and there is a public review component to the final list. The prioritized project list is generally incorporated in the region's Long Range Transportation Plan.



Public Sector Planning Products

Public sector transportation agencies pull from a variety of transportation studies, data, analytics, and models to prioritize or plan investment decisions on transportation networks. Examples of typical transportation products are listed below along with a short description of what each of them entails. These are items that can be referenced for additional information about what infrastructure plans have been made in your area or what is planned in the future and why.

- **Public and stakeholder engagement:** Efforts to engage the public, industry, and other partners throughout the course of a process or project to solicit input and feedback.
- **Scenario Planning:** a process that evaluates the effects of alternative plans, infrastructure, policies, or programs on a region or community.
- **Traffic studies:** Demonstrates existing conditions and the impact of new development or transportation changes on site access and circulations, roadways, and intersections.
- **Corridor Studies:** A study focused on a specific roadway that characterizes existing and future conditions along that roadway (including vehicle, freight, transit, bicycles, and pedestrian facilities).
- **Transportation Systems Management and Operations Plan:** Strategies that facilitate operational improvements to improve roadway or facility function without adding extra capacity.
- **Transportation Plans:** Blueprints for transportation projects in the region.
- **Resiliency Planning:** Identifying potential hazards and establishing plans to adapt, mitigate, or recover the transportation systems affected.
- **Transportation Modeling:** A mathematical approach to represent complex travel decisions so future demand for transportation facilities can be predicted.
- **Transportation Supply Chain Assessments:** Study of existing and future transportation facilities that support goods movement from production to delivery to the customer.
- **Market and Economic Analysis:** Calculating time savings, operating cost reduction, avoided accidents, quality improvements, and project costs to determine the economic viability of a transportation project.

The planning products can provide helpful background information for why decisions have been made and what decisions have been made with respect to infrastructure, modes, and facilities important to the operation of wholesale markets.



Source: Adobe. Image 620796093.

How Terminal Markets Influence the Planning Process

You can influence the planning phase to make sure the local and regional infrastructure on which produce moves in and out of your market are well maintained and operated. To make an effective case for improvements in your area, you need to be able to provide a clear description of the issues your facility faces because of the transportation system and make your case to the right agency.

Following these general steps will help your market's concerns and ideas play a role in the transportation planning process, each of which is described further in this section:

1

Define how your local transportation networks impact your terminal market.

2

Determine road ownership.

3

Determine if improvements to your roads are already planned to take place.

4

Engage with the appropriate public officials.

5

Sustain engagement with your local planning officials.

Step 1: Define how your local transportation network impacts your market.

The more specific you can define issues, the better chance you will have of successfully advocating for change. Identifying and clearly documenting a range of viewpoints and data that indicate a need for improvements will help you make a case that scarce public transportation funding is well spent in your area.

As a starting point, market managers might take actions like the ones listed below to develop information supporting their positions with local and regional city planners:

- **Talk to truck drivers coming into and out of your market regularly.** Ask them about their experience getting to and from your market. Are there any recurring themes in those conversations? Do certain intersections, stretches of roadway, etc., come up more than others?
- **Document current conditions affecting your business.** Consider driving the routes that drivers use to approach and depart from your facility and take note and/or photos of any concerns. Examples include poor road conditions, trucks navigating tight turns, safety concerns, traffic jams, etc. Doing this exercise multiple times at different times of day may yield higher quality insights. You are effectively documenting data and evidence to support your advocacy of any improvements, which will help public sectors planners better understand and focus on your specific concerns.
- **Consider:** Is your market planning to expand its size or operations in the next ten years? If you can reasonably expect growth in your market in the next decade, do you have any concerns about whether the infrastructure surrounding your market would support that increase?
- **Summarize transportation challenges clearly.** What transportation issues would greatly improve your market if addressed?

Public agencies consider how limited public infrastructure dollars can most optimally be spent across a jurisdiction to benefit the most amount of people as possible. Including multiple perspectives of how the transportation network performs in your area will help you to “make the case” to public officials and planners that your area is a high priority for investment. Table 2 below describes additional groups you might consider engaging to do so.

Table 2: Example Stakeholder Groups and Associated Engagement Opportunities

Stakeholder Group	Engagement Opportunity
Drivers	Gain firsthand experience navigating local transportation facilities. Consider asking drivers directly if there are any navigation challenges while entering/leaving the market facilities.
Shippers	The produce shippers that hire drivers to transport their products often collect data and key performance indicators about the performance of major trucking routes and supply chains. They often have a bigger picture view of shipping performance than individual truckers and may help you to identify trends and challenges affecting your market that can be addressed in the local or regional planning process.
Neighboring Businesses	Compare experiences of shipping/receiving product with other neighboring facilities. Consider asking similar businesses nearby to document their own transportation challenges and joining you in advocating for any necessary transportation improvements.
Neighboring Communities	If there are residential zones around your markets, consider how the market's transportation and operations impacts neighboring communities (noise, vibrations, etc.). Advocating for solutions benefitting both your market and the neighboring communities may help to prevent transportation or community conflicts later down the road.

Step 2: Determine road ownership.

It seems straight forward, there is an issue on a roadway or facility that needs addressed and you would like to reach out to the responsible entity. Who is that entity and how can they be identified? When identifying improvements, assets, and issues it is critical to work with the jurisdiction managing that area, asset, or roadway but it is not always clear who that might be.

To identify who owns the road, begin by looking at the name or number of the road. Signs posted on that roadway will provide the information needed: If a sign is an interstate highway sign, that roadway is operated by the State Department of Transportation. If it is a state highway or a U.S. Highway sign, that roadway is typically owned and operated by the State Department of Transportation. A local road or street is maintained by the local Department of Transportation, and a county highway or road will be owned and maintained by the county DOT. See Figure 2 below for examples of what these signs look like and what they mean in terms of roadway ownership and maintenance.

Figure 2: Who Owns or Maintains a Road?

The signs you see on the side of that road may help you find the answer.



Interstate Highway

- Owned and maintained by State Department of Transportation (DOT)



U.S. Highway

- Usually owned and maintained by State DOT
- In some cities, owned and maintained by local DOT



State Highway

- Usually owned and maintained by State DOT
- In some cities, maintained by local DOT
- Signs may have the state border, a logo, or other design instead of a circle



County Highway/Road

- Owned and maintained by county DOT
- Signs may have a white and black rectangle or other design instead of a blue and yellow shield



Local Road/Street

- Owned and maintained by local DOT

Source: FHWA Transportation Toolkit, 2017.

Tips: Identifying road ownership

- Where two intersecting roads have two different owners, consider engaging both groups.
- Multiple agencies may own and maintain the sections of the same road, especially if the road cross state, county, or local borders.

Step 3: Determine if your desired changes are already programmed for improvements.

Has the planning process already identified your issues, and programmed investments to address them in the coming years? Transportation asset updates, improvements, and new facilities are planned several years in advance of construction. As a result, it will be possible to determine if a resolution to the issue you have identified to support your market operations has already been planned or discussed. In order to determine this, after you have identified the owner of the related asset (see Step 2 above), you can look up certain planning documents and investment plans to determine if your desired improvement or project is already included.

Review relevant planning documents and investment plans to determine:

- **Identify your Metropolitan Planning Organization (MPO):** as wholesale produce markets are generally in metropolitan regions, even if on the outskirts, they are generally within the purview of an MPO: a federally required regional transportation planning body for urbanized areas with a population of 50,000

or more. Once you identify your MPO, visit their website and locate their Transportation Improvement Program, the federally mandated document describing the planned distribution of federal, state, and local funds for the next four years. Any programmed transportation projects for the next four years will be included on the list, it is a good idea to check the list to see if any projects supporting the growth or maintenance of your market is included.

- **Find the right transportation plan** - each level of government / infrastructure owner maintains a public transportation plan. For state roads, you need to look for the Long-Range State Transportation Plan (LRSTP). FHWA maintains this resource to help you find the statewide plan relevant to you.
- **Find the current list of programmed investments** – each level of government also maintains a list of prioritized construction projects it will undertake in the next several years. For state roads, look at the State Transportation Improvement Program (STIP); for municipal/local roads, go to your web browser and type the following:
 - “*Your city name* Transportation Improvement Program.”
 - Your city’s Transportation Improvement Program or TIP should appear in the results.

Tip: Reading Transportation Programs

There are no standard formats or levels of information to report in Programs of Projects, and often the project description will be just enough to define the work to be done. If you find a project in a transportation program you would like more info about, contact the relevant planning office to request more info.

Source: Adobe. Image 1184887344.



Step 4: Determine your engagement method.

There are many ways in which you can engage with jurisdictions about transportation asset improvements, issues, and plans. The ideal method of engagement can depend on a variety of factors including: jurisdiction, what planning processes are currently ongoing, where in the phase of planning, engineering, and construction the item is currently, and how critical the project/program/asset is among other factors. Below are some suggested methods for engagement and an explanation of when they might be used. Ultimately all engagement is good engagement and no method should be discounted. As you develop a relationship with the planning staff in your jurisdiction you will likely settle into a regular cadence with respect to each of the engagement methods below (i.e., you will inherently engage in different methods depending on where in the process your projects are and what planning the jurisdiction is currently engaged with).

Give your local agency a call and discuss your concerns and/or ideas for transportation improvements.

This strategy is particularly helpful after you have developed a relationship with planning staff in your jurisdiction. The best way to be up to date and involved in the planning process is through a continuous relationship with area planners. As an industry colleague, when you have a concern or idea you can directly email or call involved staff to discuss how to identify a solution or pursue the idea.

Attend a public meeting and publicly voice your concerns.

Planning staff have a public engagement component to nearly every plan and program. As such they will be holding public meetings, some might be directed towards residential attendance and some might be targeted

Source: Adobe. Image 506137836.



specifically for industry. Regardless of the audience, as an involved stakeholder you are welcome to join public meetings to discuss your concerns, ideas, solutions, etc. Again, these will typically be held in conjunction with plan development.

Local transportation agencies often have citizen advisory groups. Volunteer to participate in a stakeholder committee on an issue you care about (e.g., Freight Advisory Committee on the regional or state levels).

In addition to public meetings tied to infrastructure updates or plan development, Departments of Transportation will often have regularly occurring meetings with stakeholder groups. This might be a Freight Advisory Committee, targeted specifically towards industry, or a regular Department of Transportation update at a neighborhood or community meeting (like an Advisory Neighborhood Council). Participating in these committees helps support the Department of Transportation mission to involve the community while also sharing your ideas for improving transportation in the region and hearing others' concerns, ideas, and challenges.

Submit official comments during transportation plan's open comment periods.

All transportation plans go through a public comment period. Submitting an official comment ensures your feedback is on the record and catalogued. The planning team working on the document will respond to your comment and let you know whether, what, and if an action is taken in response.

Encourage your partners (vendors, shippers, receivers, etc.) to do all the above, too!

The objective of public outreach is to hear from a variety of stakeholders. Freight industry stakeholders can be particularly challenging to engage and hear from for planners due to different work schedules, hours, and a lack of relationship between the two groups. Any industry partners interested in engaging are encouraged to participate in the planning process in the same way as the market. Additionally, if there is a particular issue or concern, hearing from more industry about could raise the level of visibility associated with the need, request, or idea.

Tip: Engage early and think long term. Public sector planning and construction processes take a long time!

Road networks surrounding your facility are likely a combination of local, county or state roads. These different infrastructure owners pull from different funding sources, and in general do not overlap in their planning processes for maintaining their road mileages. It is important to understand who owns the roads in your local area to engage with the "right" people.

Step 5: Sustain engagement with your local planning officials.

Public sector transportation professionals actively seek stakeholder participation and input to shape their agenda and priorities. Transportation professionals understand that in order to best understand issues and impacts, they need to establish relationships with the private sector in their region. As a critical local and regional economic hub, terminal markets could have a powerful advocacy voice during the planning process. Getting involved as new plans and projects emerge is helpful, however it is more impactful to maintain a continuous, two-way partnership with local/state transportation planning partners. Speak with the transportation planning partners about your operations, priorities, and needs. This will facilitate conversations about balancing public sector priorities with market needs.

Sharing data or offer to make connections with shippers/receivers to provide more “on the ground” experience is also a valuable way to form a relationship and translate your priorities to regional transportation priorities. Public sector transportation planners struggle to understand freight movements due to the private nature of private sector operations. Providing insight into market thinking, decision making, needs, and operations facilitates a better understanding of ‘why’ certain facilities or actions are important.

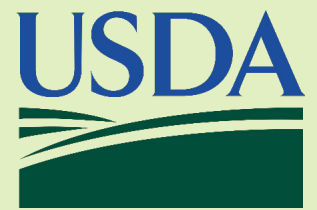




Conclusion

Terminal markets play an important role in their local and regional economies, and a high-performing transportation network is critical to its operations. As described in this Toolkit, your market can help to shape the development and performance of that network and ensure the specific needs of produce wholesalers is considered. Engaging in the planning process may take time but lays the foundation for a strong relationship with local officials, planners, and decision-makers.

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