Background

The Cement/Concrete Industry Is Conducting a State-Level Campaign to Expand Their Market Through Legislation

The economic, engineering, and environmental benefits of asphalt pavements have given asphalt a predominant share of the market in many states. This market dominance is being challenged by the cement/concrete industry, which has initiated a campaign to gain market share through legislative mandates. They have systematically introduced legislation in a number of statehouses across the country with the intent to tilt the playing field in favor of concrete pavements. These bills are often couched in terms of promoting life-cycle cost analysis (LCCA) and/or environmental life-cycle assessment (LCA). Often, they implicitly seek to shift responsibility for making pavement type decisions from the state DOT to the legislature, or to implement procedures that will favor concrete. The SAPAs have been fighting these efforts on a state-by-state basis. As the challenges continue, however, SAPA executives and industry members have requested that the Asphalt Pavement Alliance (APA) and National Asphalt Pavement Association (NAPA) assist in developing a national support system for state legislative action.

The intent of the SAPA-NAPA-APA legislative initiative is to draw upon common elements of the experiences of states that have already faced cement/concrete attacks and build a template for future SAPA efforts. In addition, NAPA and the APA will assist the SAPAs in developing effective, executable plans to protect and expand asphalt’s share of the market. Consistent messaging is being developed collaboratively in regard to market share issues including pavement design (i.e. MEPDG), pavement type selection tools, and information such as LCCA, LCA, pavement life, and reflectivity. These messages will be available for use by the states.

Game Plan

STEP 1: Activate Grassroots Network

The essence of politics is relationships. The most effective way to influence legislative action is for the asphalt industry in each state or locality to develop relationships with legislators and their staff. These relationships will allow asphalt industry representatives to educate legislators and staff on the benefits of asphalt pavements for the taxpayer and on the asphalt industry’s contribution to the state’s economy.

The first step in building a grassroots network is to ensure that asphalt producers and legislators know one another. Ideally, these relationships will be cultivated prior to any legislation being introduced by the concrete industry.
Actions that may be taken for creating and activating a grassroots network include:

**Educate asphalt producers in the state about the threat to their market share.**
If producers are complacent, SAPAs may need to make extra efforts to educate their members. Calling on each producer in the state, in his or her office, may be necessary. APA and NAPA personnel are also available to brief SAPA members on national marketing developments.

**Recognize** that harmful legislation that passes in one state is a threat to other states.

**If your association has a strong technical focus, consider engaging a professional lobbyist** who has existing relationships with legislators. Engaging a professional lobbyist on a full-time or part-time basis gives immediate access to the expertise of someone who knows the political players and legislative process.

**Advocacy is a year-round activity.** When your state legislature is not in session, you have the opportunity to build relationships with staff.

**Arrange meetings between asphalt producers and legislators** representing the geographic areas where these producers work. (An advantage for asphalt: Our industry’s production and/or paving operations are active in virtually every single legislative district in every single state; this may not be true for concrete pavers.)

**In a “getting-to-know-you” meeting,** the asphalt producer would present basic facts about his or her company: number of jobs represented by the company, economic impact of the asphalt pavement industry in the state, etc. The legislator will want to know why you are there — what you are asking for. A basic “ask” is for robust funding for the highway program. If you have additional specific “asks,” work out the exact wording and supporting points prior to the meeting.

**Remember that legislators are always eager to form relationships** with their constituents and the votes they represent.

If developing relationships with all state legislators is not immediately feasible, a good starting point is to **identify leaders and members of relevant committees** (transportation, environment, etc.) and conduct get-acquainted meetings with these individuals.

**Develop relationships with legislative leaders** in both houses of your state government — the general assembly or house of delegates as well as the state senate — and in each political party.

**Build relationships with legislators’ staffs.** The typical legislator faces an overwhelming number of issues in each legislative session. Educating a staff member is often just as powerful as educating the legislator.

**Know your audience.** Different legislators have different priorities. Make sure you understand a lawmaker’s interests and use the arguments most likely to resonate with that lawmaker (e.g., you might emphasize the environmental benefits of RAP to a legislator with a pro-environment voting record, and spend more time talking about the potential cost savings to a fiscal hawk.)
Consider special events including plant tours, in-office meetings, a legislative drive-in to the state capitol, etc. Include elected officials from the local, state, and national levels in the planning.

Consider fund-raising activities and contributions. Show your support for legislators who understand the importance of good roads.

Coordinate and collaborate with NAPA’s Federal Advocacy Initiative and with other state asphalt associations.

Be aware that, while some SAPAs rely on general-interest construction associations for legislative guidance and response, material-specific topics (such as concrete vs. asphalt) are not always covered by these groups.

Build coalitions. Experience has shown that once general-interest associations are alerted to legislation pitting one material against another, they tend to stand with the asphalt industry on opposing legislation that mandates pavement type. It is important to build relationships with other associations early. Invest time and goodwill in coalition building — the return on your investment will be substantial.

Observe all lobbying guidelines and antitrust policies and laws.

Step 2: Respond to Legislation Introduced by Cement/Concrete Industry

Some SAPAs have their own early-warning systems for legislation. In addition, NAPA’s State Legislative Tracking System is designed to alert SAPAs when any pavement-related bill is introduced. Ongoing contact with key legislators and staff will also alert you ahead of time. In some cases, you may learn about a bill as it is being written, giving you the opportunity to help craft a positive outcome or, in some cases, to prevent it from being introduced.

When a bill is introduced, a committee meeting or hearing is the inevitable next step. The SAPA should begin planning for this hearing immediately after learning that a bill has been introduced. Actions to be taken include:

- Read the bill carefully and evaluate the language. Wording that sounds innocuous may hide a specific cement-oriented agenda. It may be helpful to consult the APA, NAPA, and fellow state executives who have faced similar situations.

- Determine your stance. What specific language do you support, and what do you oppose? Would alternative language or alternative provisions be more acceptable to the asphalt industry in your state?

- Identify experts and witnesses whose testimony would be helpful. Expert testimony is well-regarded in legislatures. The term “expert” may include local industry members such as producer/contractors, small-business owners whose businesses may be threatened by the legislation, etc. Another group of experts includes those with outstanding technical credentials, such as local or nationally known consulting engineers and professors. The experts on the APA’s Field Resource Team are a great resource for a hearing. Contact the APA to access them.
Develop talking points. Build the story about why asphalt is a better choice than concrete in your state. Be forewarned by the experiences of other states that the cement/concrete industry will be attacking asphalt, not just touting the benefits of its products.

Highlight personal stories. Aim to make testimony more than a recitation of facts. Talk about specific projects, operations, and outcomes in legislators’ districts.

Prepare the experts and witnesses prior to the hearing. Coordinate the roles of the various witnesses and assign specific types of testimony to each witness. A face-to-face rehearsal is of tremendous value. Consider using a presentation trainer during your preparation period. Feel free to request help in the preparation process from NAPA and the APA.

Audiovisual aids may be appropriate in hearings. Examples may include blown-up photos, charts illustrating the complexities of pavement type selection and LCCA software, etc.

Use documents developed by national SAPA-NAPA-APA teams as the basis for state-specific documents.

Quantify the economic impact of the asphalt industry in the state: number of jobs represented, dollar impact, etc. You may include specific projects where use of asphalt has created economic opportunities or spurred economic development. Contact the APA for assistance in creating this resource.

Include benefits of RAP/RAS in your state: RAP and RAS save money, reduce greenhouse gases, and keep materials out of landfills. For help in quantifying the environmental impact of reuse/recycling, contact NAPA’s Environmental/Engineering staff.

Create handouts or leave-behinds for committee members that are concise (i.e., not more than one to two pages).

If there are no concrete paving companies in the state, include that information. Highlight what happens when your state’s limited road construction dollars flow into another state.

Document the performance of asphalt and concrete pavements in your state and be prepared to discuss them.

Supporting materials could include photographs of pavements, documentation of remove-and-replace projects, facts about user delays associated with concrete construction/rehab, etc.

Recognitions from NAPA and state associations can be cited to document asphalt excellence. Examples include state paving awards, NAPA Quality in Construction Awards, APA Perpetual Pavement Awards, and NAPA Diamond Commendations.
Step 3: Follow Up on Meeting or Hearing

After a hearing, create opportunities to follow up with legislators sitting on the committees — e.g., send additional handouts, arrange face-to-face follow-up meetings.

After a meeting, send a thank-you note. Lawmakers are like other folks — they like to be thanked. Hand-written notes stand out.

If questions arise that cannot be answered immediately, recognize this as an opportunity for follow-up with legislators and their staffs.

Step 4: Continue Deployment of Grassroots Network

Recognize that defeating one legislative attempt by the cement/concrete industry in one legislative session is not the end of the story. This is a well-organized, well-funded, multi-year campaign which is being coordinated through national cement industry stakeholder groups and their state and regional affiliates. If one bill fails, another is likely to be introduced in the current legislative session or the next one. Eternal vigilance is the price of market share.

Become an Informed Advocate for Asphalt

Know the Competitive Landscape

A primary argument advanced by the concrete and cement paving industries is that they want an opportunity to bid on more paving projects. They seek to portray themselves as underdogs. In reality, however, most state DOTs spend more on concrete bid items — including bridges, sound walls, abutments, jersey barriers, etc. — than they do on asphalt. Presenting this fact to legislators is one way to effectively undercut the cement/concrete industry’s argument.

In a number of states, the cement/concrete industry has introduced pro-concrete legislation under the guise of a “balanced pavement program.” Their true objective is to legislatively mandate the use of concrete pavements regardless of engineering, economic, or environmental concerns.

While every state’s traditions and practices are unique, some principles are universal:

- The three E’s of pavement design — environment, engineering, and economics — favor the use of asphalt pavements for most projects.
- State legislatures and city/county councils should not become the engineering arm of government. Engineering expertise resides in DOTs and public works departments.
- Unfunded legislative mandates that encourage the use of one pavement type over another are flawed.
- The fourth E is education. It is important for asphalt producer-contractors to educate elected and appointed officials, and their staffs, about highways and about asphalt pavements.
Communicating the Benefits of Asphalt

The following are several key benefits of asphalt pavements that should be communicated to lawmakers.

Asphalt Is the Economically Sustainable Choice

Choosing asphalt pavements is fiscally conservative. Long-life (i.e., perpetual) asphalt pavements are the only pavements that can remain in service indefinitely without structural failures that would eventually require extensive reconstruction or complete removal and replacement. For maintenance, the top asphalt layer is removed for reuse/recycling, then replaced quickly causing minimal traffic congestion. The underlying pavement structure stays in place. By contrast, when a concrete highway reaches the end of its useful life, it often must be shut down for months or even years in order to be removed and replaced. An asphalt highway built today is a permanent asset that can be preserved indefinitely with just routine maintenance. Clearly, an asphalt road whose structure will endure for several lifetimes is a better investment than a concrete pavement whose structure will wear out and need to be replaced.

Asphalt is a Locally Produced Product

Asphalt pavement material is produced locally, usually within 25 miles of the paving site. The paving material is 95 percent aggregates (stone, sand, and gravel — almost always locally sourced) and 5 percent asphalt cement (a petroleum product) by weight. The majority of virgin asphalt cement used in this country is produced at U.S. refineries using crude from North American sources. In addition, reactivated binder from asphalt pavement and shingles reclaimed from local projects can replace up to 50 percent of the asphalt cement.

Asphalt Pavers are Local Companies

There is an asphalt plant in virtually every congressional district, employing a local work force and paying local taxes. Asphalt paving companies work in every neighborhood in the United States.

Life-Cycle Cost Analysis

Owners of roads and highways use life-cycle cost analysis (LCCA) to evaluate all the economic impacts associated with a construction project. Asphalt’s economics — including lower cost for initial construction, longer life, greater salvage value, reduced delays for road users during maintenance, and prevention of the need to remove and replace the road at the end of the design life — add up to the best value for the taxpayers.
Asphalt Is the Environmentally Sustainable Choice

From the production of the paving material, to the placement of the pavement on the road, to rehabilitation, through reuse/recycling, asphalt pavements minimize impact on the environment.

Less Energy Is Consumed by the Traveling Public
Definitive studies sponsored by FHWA show that pavement smoothness can reduce fuel consumption. Vehicles traveling on smooth pavements can consume up to 4.5 percent less fuel than when traveling on rough pavements. Asphalt pavements start out smooth and stay smooth over the long haul.

In contrast to this FHWA research based on real-world experience, concrete promoters cite a report from the Concrete Sustainability Hub (CSH) at MIT that posits a potential fuel saving of 1 percent to 3 percent fuel for vehicles traveling on stiffer roads. The asphalt industry should be aware of the following facts:

• The CSH report is based on a modeling effort, not field observation.
• The report’s authors note that smoothness is more important than stiffness.
• The report’s authors note that their model does not account for factors such as concrete pavement joints that roughen the ride and therefore increase fuel consumption.

These are just a few of the nuances of the CSH study that the cement/concrete lobby does not include in their promotional efforts.

Environmental Life-Cycle Assessment
The asphalt industry supports environmental life-cycle assessment (LCA) processes. When all factors — including acquisition and processing of raw materials, fuel used by the vehicles traveling over the road during the use phase, and salvage value — are considered, asphalt is shown to be the more environmentally friendly material.

• Asphalt pavements require only about half the energy to produce and construct than concrete.
• Because asphalt pavements can be perpetual, less energy is consumed in maintenance and reconstruction.
• Emissions associated with road shutdowns for maintenance are reduced.
• Because asphalt pavements are smoother, the vehicles traveling over an asphalt road network consume less fuel.

Asphalt Leads the Way in Reuse/Recycling
The asphalt industry reuses and recycles nearly 70 million tons of its own product every year, making it America’s number one recycler. Both reclaimed asphalt pavement (RAP) and recycled asphalt shingles (RAS) reduce the amount of virgin asphalt cement needed for constructing new roadways. When RAP and RAS are incorporated into new pavement, the asphalt cement is reactivated, becoming part of the glue that holds the new pavement together and replacing some of the virgin asphalt cement that would otherwise be required. (This can’t be done with concrete; it is impossible to reactivate the portland cement that binds together concrete pavement.)
Waste products from other industries, such as used tires and glass, can also be used in asphalt to reduce costs, conserve energy, and further decrease the generation of greenhouse gases.

**Asphalt Has Cooled Down the Mix**
Asphalt’s innovative warm-mix technologies reduce the temperatures at which pavement material is produced and placed. Warm mix conserves 15 to 30 percent of the energy required at the mixing plant, reduces emissions, and yields construction benefits including a longer paving season in cool climates plus better performance and longer life for the pavements.

**Asphalt Sequesters Carbon**
The U.S. Department of Energy recognizes asphalt as a top material that sequesters carbon. The asphalt cement in pavement will never be consumed and will never emit greenhouse gases. Instead, asphalt pavement is a permanent resource that can be reused and recycled over and over again.

**Asphalt Reduces Pavement Noise**
Asphalt is the quiet pavement. Studies show that the noise-reducing properties of asphalt last for many years. Noise reductions of 3 to 10 dB(A) are common. Reducing noise by 3 dB(A) is about the same as doubling the distance from the road to the listener, or reducing traffic volume by 50 percent. Using quiet asphalt can also make noise walls unnecessary, enhancing aesthetics and saving money.

**Porous Asphalt Helps Improve Water Quality**
Porous asphalt pavement systems are recognized by the U.S. EPA as a best management practice for stormwater management. When used for parking lots, roads, walking/biking paths, and so forth, porous pavements can turn runoff into infiltration; restore the hydrology of a site, or even improve it; improve water quality; and eliminate the need for detention basins.

**Environmental Applications**
Drinking water reservoirs in California are often lined with asphalt. Landfills are often lined and capped with asphalt. Some state fish and wildlife agencies use asphalt pavement to line the ponds where they rear sensitive salmon or trout fingerlings. These examples intuitively illustrate the principle that asphalt pavements are safe for living creatures who depend on a supply of clean water.

**Cleaner Air**
Emissions from asphalt plants, including greenhouse gases, are very low and well-controlled. Between 1970 and 1999, the asphalt industry decreased total emissions by 97 percent while increasing production by 250 percent. Emissions from asphalt plants are so low, the EPA removed asphalt plants from its list of major sources of hazardous air pollutants.

**Cool Cities**
Emerging science from research institutions such as Stanford University and the EPA’s National Center of Excellence on SMART Innovations for Urban Climate and Energy at Arizona State University shows that highly reflective pavements may intensify the urban heat island effect by reflecting solar radiation into the atmosphere and buildings. Highly reflective surfaces may also be responsible for a decrease in annual rainfall in rapidly growing megapolitan areas.
Asphalt is the Choice for Safety

Open-graded asphalt surfaces allow rainwater to drain through the pavement surface, reducing the amount of splash and spray kicked up by vehicles. Resurfacing with open-graded asphalt has been shown to reduce crashes and fatalities on highways. The concrete industry does not have a product that can be used similarly on roads and highways. Even when open-graded asphalt is not used, asphalt is the safe choice because smooth asphalt roads give vehicle tires superior contact with the road.

Traffic Relief — Asphalt Moves Traffic Along

In areas where closing a road for rehabilitation or remove-and-replace reconstruction would dump increased traffic on to neighboring routes for months or years, asphalt is the answer.

Highways and roads can be milled for reuse/recycling, then overlaid, during off-peak hours, minimizing disruptions for drivers and businesses. An entire freeway can be resurfaced without commuters ever being inconvenienced. This also prevents the production of excess fuel consumption and greenhouse gases associated with cars and trucks sitting in congested conditions. A mill-and-overlay can quickly restore smoothness and ride quality to a road, saving fuel and reducing auto maintenance costs for taxpayers.

Asphalt allows planners and managers a way to fix congestion hot spots and bottlenecks, quickly and cost-effectively.

Conclusion

Lawmakers want to ensure that taxpayer dollars are spent wisely when investing in public infrastructure.

When the facts are laid out, the economic, engineering, and environmental benefits of asphalt pavements are clear. However, getting these messages across to lawmakers takes repeated contact and the development of personal relationships. Activating the grassroots, watching for legislative threats and opportunities, meeting with legislators, and spreading the word about asphalt’s advantages are critical to protecting and expanding asphalt’s share of the pavement market.