Tonight’s presentation will focus on the depressed highway alternatives, as well as the street-level alternatives.
We are considering two depressed highways, which differ in their length. Both begin at E. Adams Street, but the shorter one would end at E. Genesee Street, and the longer one would extend to Butternut Street.

Both alternatives have two lanes in each direction, meet current (60 MPH) standards, and would build new interstate-to-interstate connections at the I-81/I-690 interchange.

The depressed highway would be about 25 feet below surface.
Under the depressed highway alternatives, I-81 would pass over the railroad, then descend into a trench before E. Adams Street.

The dark blue areas indicate where the street grid would be disrupted.
The orange line on the west side of I-81 represents a potential multiuse path, which could terminate at Wilson Park between E. Taylor and E. Jackson Streets.
The primary east-west crossing streets could be carried over the highway on overpasses, which might also be re-envisioned to include plantings, public art, and pedestrian spaces. Pedestrian safety would be enhanced.

The width of the depressed highway, including its ramps and Almond Street on top of it, would fill most of the available property line. However, there would be sufficient room north of E. Genesee Street to accommodate a north-south sidewalk, street trees, and other pedestrian/bicycle enhancements.

Local streets on the west side of the depressed highway between E. Genesee and E. Harrison Streets would likely be eliminated. This drawing presents concepts for a wide landscape buffer from the highway, as well as a park with an off-road bike facility that would connect with the east-west Connective Corridor and the Erie Canalway Trail to the north.

This plan shows the disruptions to E. Fayette, E. Washington, and E. McBride Streets.
As shown by this plan and profile, certain streets would change under the depressed highway alternatives. Monroe Street would become a dead-end street at Almond Street, and vehicles would no longer make the turn from E. Monroe to Almond. E. Jackson, E. Fayette, E. Washington, E. Water, and E. McBride Streets would be severed, no longer functioning as through streets.

E. Adams, E. Harrison, and E. Genesee Street would be reconstructed as overpasses over the depressed highway.
This section shows the two lanes in each direction for I-81, as well as lanes on Almond Street, above the depressed highway.

This particular concept shows 12 travel lanes, including both I-81 and Almond Street. To maximize space for plantings, a sidewalk on each side, and a multiuse path, two of the lanes have been cantilevered over the depressed I-81. This is contrary to the tunnels along Almond Street that have the local lanes overtop of the tunnel structure. This configuration uses a wider footprint along Almond Street.
This section of the depressed highway—looking north between E. Cedar and E. Genesee Streets at the southern end of the interchange area between I-81 and I-690—shows exit ramps and high-speed interstate-to-interstate ramps on the west side, as well as Almond Street on the east of I-81.
Bird’s-eye view of what a depressed highway could look like with urban design improvements
This view shows a large overpass over the depressed highway at Harrison Street. We’ve shown a placeholder for a vertical aesthetic element, perhaps public art, as well as planted areas and pedestrian crossings.
This slide shows a concept for the I-81/I-690 interchange under Alternative DH-1, Depressed Highway from E. Adams Street to Butternut Street.

Several streets (in pink) are severed due to the new ramps, shown in orange, and direct connections between the two interstates are shown in blue. No through traffic would be allowed on these streets, and permanent detours would be necessary.
Construction of the open highway would need to consider the geological conditions underneath Almond Street, which include a high water table, saline groundwater, and weak soils. There would also be considerable impacts to underground utilities and relocation would be required.

The existing I-81 viaduct would be demolished before construction of the depressed highway would begin. Traffic would be routed to I-481 during construction.

We anticipate that it would take about 5-6 years to construct the depressed highways.
We have three street-level alternatives.

All alternatives would demolish the existing I-81 viaduct, which would be decommissioned as an interstate, and make improvements to I-481, which would be redesignated as I-81. They would fully meet today’s design standards. Like the other alternatives presented before in other meetings, the street-level solutions would reconstruct the I-81/I-690 interchange, providing connections in all directions.

The first street-level idea would replace the viaduct with a boulevard along Almond Street. The second and third street-level ideas would use Almond Street and a combination of one or more local streets to carry traffic. These last two approaches may have the benefit of dispersing traffic through the city.
All street-level solutions would route some traffic to I-481, which would be designated as the new I-81 (as shown in red on the slide). Therefore, all of the street-level solutions would require improvements to I-481.

The former I-81 highway would be re-designated—or renamed—as a highway spur (such as I-581) or state highway (such as State Road 581). These sections of roadway are shown by the green lines on the slide.

Shown in yellow is the existing viaduct area that will be removed and replaced with a street-level roadway.

At this time, it looks like no building acquisitions are needed to make these improvements to I-481, which would basically consist of adding auxiliary lanes at three stretches of the highway—as you can see here—and reconstructing the two existing I-81/I-481 interchanges.

Some building acquisitions are anticipated within the existing I-81/I-690 interchange area.
These interchanges would be slightly enlarged to fully meet today’s standards for a 65 MPH speed limit.

At the south interchange of I-481 and I-81, the curves shown in red would be flattened to meet these standards. The ramps to and from the former I-81 would be rebuilt (shown in green), as well as the existing Brighton Avenue bridge over the interstate.
On the north interchange of I-481 and I-81, a new flyover ramp for traffic heading south-to-east would be constructed, replacing the existing low-speed loop ramp that currently serves this movement.

Again, at this time we don’t anticipate any building acquisitions to make these improvements.
This slide shows a plan and profile view of Almond Street as it would look under the three street-level concepts.

Motorists coming from the south—on the left of the slide—would reduce speed before the railroad tracks and descend down to street level near E. Monroe Street. Because of this descent, E. Jackson Street would become a dead-end street at Almond Street.

At the north end of Almond Street, traffic will connect to the I-690 and the former I-81. One or more north-south streets may become dead-end streets in order to make this connection, as detailed later in the presentation.
This plan shows Almond Street under SL-1, the Boulevard Alternative. Key features to note on this plan are the Connective Corridor, Forman Park, University Hill, Pioneer Homes, E. Adams, E. Harrison, and E. Genesee Streets.

The existing I-81 viaduct is visible in the background, crossing E. Fayette and E. Washington Streets. With the removal of the viaduct, this area could potentially be re-purposed for other land uses.
Initial traffic studies indicate that six lanes of traffic are likely to be needed to maintain an efficient flow of traffic between Downtown, University Hill, the Southside, and other neighborhoods. There are many ways to lay out a new boulevard along Almond Street, which in some areas is nearly 200 feet wide. This is sufficient space to accommodate vehicles, bicycles, pedestrians, wide park-like medians, street trees, and other improvements.
This aerial view illustrates what the Boulevard might look like from a bird’s-eye perspective over the city.
This slide shows a possible aerial view of the Boulevard at E. Harrison Street.

As shown previously, the Boulevard likely would have three lanes in both directions, separated by a wide, tree-lined median. The available width would allow room for street trees and generous pedestrian space on both sides of the roadway and in the median. This median may include vertical features that could act as gateways/arrival markers, as well as emphasize the primary east-west connections at E. Adams, E. Harrison, and E. Genesee Streets.

There is space for an off-road bike path, which in this instance is shown on the east side of Almond Street. A connection to the Connective Corridor and the Erie Canalway Trail could be provided. The bike path would also connect to the Southside or University Hill.
This is a street-level perspective of the Boulevard at Harrison Street.

The foreground shows the bicycle path crossing Harrison Street.

Pavement color or textures could be used to improve the pedestrian experience and safety on Almond Street and cross-streets. The “bump-outs,” or extensions, of curbs at the intersections would reduce the crossing distances as much as possible. Pedestrians would cross six travel lanes with ample refuge provided in the center median.

Notice the visual change with the viaduct in the existing photo versus the rendering with no viaduct.
SL-2 and SL-3 would make improvements to both Almond Street and a combination of other local streets to disperse the traffic throughout the city street grid.

Other local streets could include, for example, Townsend Street, Clinton Street, University Avenue, State Street, Salina Street, West Street, etc. One or more of these street could be considered as part of both of these solutions. These streets could be enhanced as part of the project.

SL-2 and SL-3 differ from each other in that one (SL-2) envisions Almond Street and other local streets as one-way streets, and the other (SL-3) would make them two-way streets.

Because traffic would be routed to other local streets, Almond Street would carry fewer than six traffic lanes, which would shorten crosswalks and open up more space for development possibilities.
Under SL-2: **One-Way** Almond Street and Other Local Street(s), Almond Street would be one-way northbound from E. Harrison Street to the connection with I-690. South of Harrison Street, it would be a two-way street. Another street would be used by southbound traffic, for example, Townsend Street, as shown in the diagram.

SL-3: **Two-Way** Almond Street and Other Local Street(s) is the same as the One-Way concept except SL-3 would keep traffic running in both directions on local streets.
This plan shows Almond Street and Townsend Street under SL-2, and it would apply to SL-3 with slight modifications for two-way traffic. Key features to note on this plan are the Connective Corridor, Forman Park, University Hill, Pioneer Homes, E. Adams, E. Harrison, and E. Genesee Streets.

The existing I-81 viaduct is visible in the background, crossing E. Fayette and E. Washington Streets. With the removal of the viaduct, this area could potentially be repurposed for other land uses.

As stated before, Almond Street would be a one-way street north of E. Harrison Street. Because of the high volume of traffic coming from University Hill and traveling south in the afternoon rush hour, southbound lanes would need to be provided south of E. Harrison Street to access the former I-81.
One of the reasons we investigated SL-2 and SL-3 was to reduce the number of lanes on Almond Street, thereby shortening the number of lanes that pedestrians would need to cross.

This section shows one possible way to arrange travel lanes and bike/ped amenities on Almond Street under SL-2. The graphic shows three northbound travel lanes in the center of the roadway. To either side is a local road with parallel parking, street trees, and sidewalks to support adjacent land uses and encourage redevelopment. There is also space available for a wide median that could be used for a bikeway or shared-use (bike/ped) path, along with trees.

Under SL-3, the local road, shown on the left-hand side of the slide, would accommodate southbound traffic.
This section shows one possible arrangement of Townsend Street under SL-2. One block west of Almond, Townsend would be the primary southbound roadway in SL-2.

This particular section illustrates how Townsend Street could be reconfigured. It would have three southbound travel lanes, parallel parking lanes, street trees, and sidewalks. An off-the-road bike path is shown on the west side.

Under SL-3, Townsend Street would be very similar to what it is today, but it would be enhanced with parking lanes, street trees, sidewalks, and bike paths.
As stated earlier, Clinton Street could be another street used to carry traffic under SL-2 and SL-3. Under SL-2, it would remain a southbound one-way street but would be improved with landscaping and urban design to create a consistent and identifiable character. Under SL-3, Clinton Street would be converted to a two-way street.

From both Townsend and Clinton Streets, motorists heading south could connect over to Almond Street and former southbound I-81 using Adams Street, which would be one-way eastbound.
This aerial view illustrates what SL-2 and SL-3 might look like from a bird's-eye perspective over the city.

This view helps visualize a pattern of connected streets using a southbound Townsend Street, an eastbound Adams Street, and a northbound Almond Street under SL-2.
This aerial view of SL-2 at Almond and Harrison Streets shows three northbound travel lanes. On either side of those lanes are frontage roads with on-street parking, trees, and sidewalks. This arrangement of space would confine the higher-speed traffic to the center of the roadway. The frontage roads flanking the higher-speed roadway would carry slower traffic and also would include sidewalks and bicycle pathways. Opportunities to create a consistent, attractive, and defined space would be explored. Under SL-3, the local road, shown on the left-hand side of the slide, would accommodate southbound traffic.

An off-the-road bicycle path is shown on the east side of Almond Street, though it could be placed elsewhere. The path would connect to the Connective Corridor and the Erie Canalway Trail to the north, as well as serve the Southside or University Hill.

Trees and generous pedestrian spaces could be provided on both sides of the roadway, and likely in the central median. This median may include vertical features that could act as gateways/arrival markers, as well as emphasize the primary east-west connections at E. Adams, E. Harrison, and E. Genesee Streets.
This is a street-level perspective of Almond Street at E. Harrison Street under SL-2 and SL-3.

The foreground shows the bicycle path crossing Harrison Street. There are three lanes of northbound traffic, as well as the two flanking roads.

Again, pavement color or textures could be used to improve the pedestrian experience and safety on Almond Street and cross-streets. The bump-outs of curbs at the intersections would reduce the crossing distances. Pedestrians would cross five travel lanes with ample refuge provided in the center median. Other versions of this concept would omit the flanking roads, thereby reducing the number of travel lanes on Almond Street to as few as three.
Costs for all alternatives are shown above, giving a total range of $800 million to $3.3 billion.

These costs include:
• Utility Relocations
• Temporary Construction / Roads and Maintenance of Traffic (MOT)
• Demolition and Mass Excavation
• Elevated Structures and Retaining Walls
• Highways and Local Streets
• Lighting and Signage
• Intelligent Transportation Systems (ITS) – integration of communication technology into the transportation infrastructure and in vehicles
• Landscaping/Streetscaping
• Contingency – allowance to cover unknown or uncertain elements of the project
• Escalation (to mid-point of construction) – a calculated amount of inflation of today’s dollar value

These costs exclude:
• Planning & Environmental
• Design and Engineering Support During Design
• Project Management, Construction Management, and Construction Inspection
• Financing and Legal
• Operation and Maintenance – cost over the life of the transportation infrastructure
• Management Reserve – allowance for reserve money in the event of an unforeseen condition, growth of scope, additional design support, etc.