SHIFT 2020 Workgroup – Meeting Minutes

8/8/18 - Rm C122 - 9:30 -12:00

Attendees:

Last Name	First Name	Representing
Allen	Charlie	KYTC – Highway District Office 4
Asher	Jill	KYTC - CO Highway Design
Balaji	Jay	KYTC - CO Planning/Modal
Blackburn	Jason	KYTC – Highway District Office 10
Chaney	Larry	KIPDA
Courtney	Stacey	Purchase ADD
Higdon	Tonya	KYTC - CO Planning
Hulker	Daniel	KYTC - CO Planning
Jones	Travis	KYTC - CO Program Management
Mills	Deanna	KYTC – CO Planning
Moore	John	KYTC - CO
Norman	Anthony	KYTC – DEA/Planning
Rogers	Josh	KYTC - CO Maintenance
Ross	Steve	KYTC - CO Planning
Saha	Neela	KYTC - CO Planning
Shive	Chad	KYTC - CO Maintenance
Skaggs	Mike	Lincoln Trail ADD and Elizabethtown MPO
Spencer	Amanda	KYTC- CO Planning
Thelen	Jeff	Northern KY ADD
Thompson	Travis	KYTC – Highway District Office 5
Thomson	Scott	KYTC - CO Planning
Vaughan	Eileen	KYTC – CO Planning

Summary of issues for further consideration

SHIFT2020 Asset Management Technical Workgroup

Bridge Asset Management issues:

- Overlap between Bridging KY (Royce's 1000+ bridge list) and the AM boost
- 20 ton vs <44 ton weight limits and corresponding boosts
- Indicator in CHAF whether bridge work to be included in the project

Pavement Asset Management issues:

- Data coverage on rural secondary and county routes vs state-maintained
- Pavement evaluation schedule coinciding with the SHIFT schedule

SHIFT2020 Economic Development Technical Workgroup

Economic Competitiveness issues:

- Current approach (# of jobs created) vs hybrid approach (percentage increased jobs AND increase in the total number of jobs)

Accessibility/Connectivity issues:

- Grouping the tiers as a method of normalizing the equation
- Changing each tier with a denominator difference subdivided between tiers. (ie, Tier 1 denominator = 200, Tier 2 denominator = 250, Tier 3 denominator = 300, Tier 4 denominator = 400, Tier 5 denominator = 500, and Tier 6 denominator = 600
- Adding or further defining improvement types (w Safety and Benefit/Cost Technical Workgroups working on the final recommendations)
- Are we using CRF too much?
- Using the LFPR measure
- Using Travel Times Savings: negative values vs absolute numbers

Meeting Minutes

SHIFT 2020 Workgroup: Overview of Today's Presentation – by Eileen Vaughan

- The meeting started at approximately 9:30 a.m. and began with an overview of what we are doing
- Eileen introduced Anthony Norman who will be working with the CHAF team

The presentation notes below will only be information in addition to the power point presentations.

Presentation: SHIFT2020 Asset Management Technical Workgroup

Asset Management Technical Workgroup members: Chad Shive (presenter), Josh Rogers, Jay Balaji, Deanna Mills

Bridge Asset Management questions:

- Is there any overlap between Bridging KY (Royce's 1000+ bridge list) and the score? I.e. Did the AM Team give any boost to bridges in the Bridging KY program? (John Moore)
    - Josh Rogers: Without knowing how, or if, the 1000+ bridges would be addressed, the team did not consider any effects of the Bridging KY program.
- The purpose of Bridging KY is to get all the bridges to at least 20 ton weight limits. Why would additional boosts be given to raise the weight limit to 44 tons? (Jason Blackburn)
    - Josh explained that 18 tons is probably the minimum weight limit for a school bus. The 44-ton limit is the minimum weight limit for all vehicles types. Although the 20-ton limit is a good goal for the short-term, the ultimate goal is that no bridges in Kentucky are posted for weight limits. It may be part of Bridging KY to eliminate those low-rated structures so school buses would be able to use them.
- If there were a way to do it, would there be value in having the project owner indicate in CHAF whether or not the asset would actually be touched/addressed by the project so that points are only awarded if the project is likely to address the asset? (Amanda Spencer)
    - Josh: The team did not consider this.
- Is there an asset management boost for having multiple bridges requiring maintenance on a project? (Steve Ross)
    - Josh: No, the asset management points are calculated from the bridge in worst condition.

Pavement Asset Management questions:

- Who is determining/calculating the Pavement Distress Index (PDI) and what lengths does the index cover? (Jason Blackburn)
    - Chad: The PDI is a system-wide assessment of the pavement condition. The pavement sections are broken up into logical homogeneous sections. If a project limits cross two PDI sections than length weighted average would be used.
- The data coverage along rural secondary and county routes was questioned. (Eileen Vaughan and John Moore)
    - Chad: the current data coverage is on state-maintained routes only. Projects on non-state-maintained routes would only be scored by the original Treatment-Year method with the PDI portion being null.
- John Moore commented that Jon Wilcoxson had a method to estimate the rural secondary routes.

- When are the routes evaluated and does the evaluation schedule coincide with the SHIFT schedule? (Jill Asher)
    - Chad: Pavement projects originating from Maintenance are generally known and scoring for SHIFT can be checked versus awarded projects. Pavement projects originating from other divisions are sometimes not known until after project completion and might not be entered into Pavement Management System until that time. These projects have a chance to be scored as poor pavement even when they might be new pavement by the time SHIFT projects are scheduled.

Presentation: SHIFT2020 Economic Development Technical Workgroup

Asset Management Technical Workgroup members: Tonya Higdon (presenter), Daniel Hulker, Lindsay Carter, Neela Saha, Scott Thomson, Steve Ross, Travis Jones

- Jason Blackburn (gleefully) expressed his support of using the percent change in job numbers instead of straight total number of jobs created.
- What is the 1101 number on Slide 13, Title: SHIFT Projects by % Increase in Jobs per Country? (Amanda Spencer)
    - Daniel: That is the total number of projects in Kentucky. All projects were run through TREDIS regardless of whether they were modeled or not modeled.
- What was used for non-modeled projects? (Jay Balaji)
    - Daniel: TREDIS can calculate economic impact two different ways: modeling and by the Highway Capacity Manual (HCM) method.
- Is this measuring the local impact proportional to the county it is in? (Steve Ross)
    - Daniel: Yes.
- What is the hybrid approach? (Jason Blackburn)
    - Tonya: Whichever measure - either percent increase jobs or increase in the total number of jobs - fared better in the district is the measure your district uses.
- Regarding the accessibility/connectivity formula, how did Madison County go from a Tier 6 to a Tier 3? (Jason Blackburn)
    - Tonya: the tiers are based on unbiased census data. TREDIS models county-level effects, not sub-county effects. We are unable to perform microsimulations on all of the projects in the highway plan due to sheer numbers so TREDIS is the best tool we have and it relies on the census data. We don't know the specifics, but we can look into some possible reasons for the change.
    - John Moore: it would be unusual that such a dramatic change would go unnoted. John suggested that the data be verified. It may be that Eastern Kentucky University (EKU) may have made budget changes which could affect the local economy.
- Is accessibility/connectivity part of local boost?
    - Tonya: Not directly. Indirectly as it is part of the economic component of the regional score. The regional score is where the ADDs, MPOs and HDOs give their respective boost points.
- Where is the final recommended formula for economic competitiveness? (Eileen)
    - Tonya: The final statewide formula is still being worked out. Our group was split on whether to go with the current approach of total number of jobs created versus the hybrid approach of best rank from either the total number of jobs created versus the percentage of jobs created per

county. This will be a final decision for the advisory group keeping in mind that this component covers the Statewide Economic engines (counties) of Kentucky.

- Why was AADT capped at 20,000 vehicles per day (VPD)? (Jill Asher)
    - Tonya: An AADT of 20,000 VPD yields the maximum 100 points.
- What is the reasoning behind lumping tiers together by equation? (Jason Blackburn) There is a significant difference between Tier 1 and 2 in Perry County - why not represent that in the equations? (Jason Blackburn)
    - Tonya: Grouping the tiers is a method of normalizing the equation and creating a subtle variations so counties do not focus heavily on tier-to-tier changes. North Carolina groups the tiers together and our SHIFT program emulates NC's program. The possibility of revising the tiers groupings is a valid theory that the Technical Workgroup is not opposed to changing the groupings.
    - Steve: We could consider changing each tier with a denominator difference subdivided between tiers. (Say, Tier 1 denominator = 200, Tier 2 denominator = 250, Tier 3 denominator = 300, Tier 4 denominator = 400, Tier 5 denominator = 500, and Tier 6 denominator = 600.) Tonya agreed and thought this is a viable alternative.
        - Note: If we currently have concerns with only 3 counties jumping Tier equations, how much more of a challenge will it be in the future when dealing with local officials and the public should we change equations between every Tier? We currently have 21 counties changing tiers (with some improving) but only 3 counties being distressed to the point of changing equations.
- Were you suggesting improvement types be added or further defined? (Eileen Vaughan)
    - Tonya: The Economic Development Technical Workgroup is recommending that improvement types be added but we still do not have the completed list. The Safety and Benefit/Cost Technical Workgroups will make the final recommendation.
- Are we using CRF too much? (Jason Blackburn)
    - Tonya: That's a more appropriate question for Benefit/Cost Technical Workgroup. The project types are only used to define the types of improvement for a binary add.
- If you score low in Labor Force Participation Rate (LFPR), why should you get put in a lower tier? We want projects in areas that people are working. (Amanda)
    - Tonya: That is accounted for statewide. It's flipped regionally in an effort to promote development in more distressed areas.
        - Note: The LFPR dataset was one directly requested by the Cabinet of Economic Development to be added as a measure to reflect the profile for counties in need.
    - Neela: LFPR measures people that are currently working and those actively seeking work. The LFPR measure only applies to non-institutionalized populations (not in jail, etc.). There is a difference between unemployment and the LFRP.
    - John Moore: Economic component = where the county engines are; accessibility/connectivity = brings in the distressed county component; combination of both favors counties that are distressed and are not connected.
    - Jason Blackburn: The Statewide measure favors Districts 5, 6, and 7, and the Regional measure favors the rural counties and districts.
    - Amanda: If there are 2 otherwise equal counties (in terms of poverty, education, etc), it seems that we would want to favor the county with the higher LFPR.

- Why is the Statewide score based on the number of Jobs and the Regional score based on percentage of jobs? District 5 (Louisville) is competing with Indianapolis, not Lexington. (Travis Thompson)
    - Tonya: The purpose was to give each group it's own points. From a statewide perspective, it would seem more appropriate to go with the number of jobs perspective because it does not matter where the jobs are in terms of statewide revenues but the total number of jobs. However, at the Regional, Accessibility/Connectivity level, the more local impacts are favors to aid the more economically distressed counties.
    - Steve: The idea was to give each a boost without hurting those higher ranked projects by total number of jobs created too much.
- How does reconstruction/major widening decrease Travel Time Savings (TTS)? Aren't we invalidating the projects who had positive TTS scores? (Jason Blackburn)
    - Daniel: The routes attract traffic from outside the areas (from other alternative, less desirable routes), which increases the number of trips. The model is at the limits of it's capabilities and may not reflect the local roads.
    - Scott Thomson: Or it could be a coding anomaly as there were 3 different consultants used to code the routes. The negative numbers are not on par with the positive numbers by magnitude, but anomalies should be insignificant. The model is an imperfect tool but is the best we have.
    - Travis Jones: If you widen the Gene Snyder it will bring traffic from the local roads = less TTS.
    - Jason Blackburn: Does not agree with using the absolute value of the negative TTS numbers.
    - John Moore: We should not be putting our fingers on the scale.
    - Larry Chaney: We may need to go ahead and show the negative TTS if that is what is going to reflect the reality of what is happening.
    - Eileen and Jill: if you have a zero for TTSs, then TREDIS returns with a zero. It is a black box and is a big deal. It's the best tool we have right now.
    - Eileen: There were a lot of zeros and many of those were run through the HCM method to get rid of the zeros. It's difficult to translate a zero to the public (Larry agreed with explaining zeros to the public).