

SHIFT 2020 Workgroup – Minutes

11/09/2018 - Rm 512 - 9:30 a.m. - 12:30 p.m.



Attendees

Last Name	First Name	Representing
Allen	Charles	KYTC – Highway District 4
Asher	Jill	KYTC - CO Design
Balaji	Jayalakshmi	KYTC – CO Planning
Blackburn	Jason	KYTC – Highway District 10
Chaney	Larry	KIPDA
Courtney	Stacey	Purchase ADD
Harrod	Justin	KYTC – CO Planning
Higdon	Tonya	KYTC - CO Planning
Hulker	Daniel	KYTC - CO Planning
Loyselle	Maridely	KYTC - CO Planning
Lykins	Elizabeth	KYTC – CO Planning
Mills	Deanna	KYTC – CO Planning
Moore	John	KYTC – State Hwy Engineers Office
Norman	Anthony	KYTC – DEA/Planning
Pelfrey	Mikael	KYTC - CO Planning
Reynolds	Jonathan	KYTC – CO Planning
Ridgeway	Nathan	KYTC – CO HSIP
Rogers	Joshua	KYTC - CO Maintenance
Ross	Steve	KYTC - CO Planning
Shive	Chad	KYTC - CO Maintenance
Skaggs	Mike	Lincoln Trail ADD and E'town MPO
Spencer	Amanda	KYTC- CO Planning
Thelen	Jeff	Northern KY ADD
Thompson	Travis	KYTC – Highway District 5
Thomson	Scott	KYTC - CO Planning
Witt	Thomas	KYTC - CO Planning
Vaughan	Eileen	KYTC – CO Planning
Vaughn	Michael	KYTC – CO HSIP

Summary of issues for further consideration or action

- Eileen will send out an email detailing the agenda items that were not covered during this meeting



SHIFT 2020 Workgroup

11/9/18

Rm 109

9:30 -12:30

Review / Questions

Roadway Characteristics

Decision Lens Survey Results

Regional Score Weights

Statewide Score Weights

Updated Data:

Asset Management – Eligible improvement types

Economic Growth – Eligible Improvement types

Benefit Cost – Safety Benefit Calculation

Meeting Minutes

SHIFT 2020 Workgroup: Overview – by Eileen Vaughan

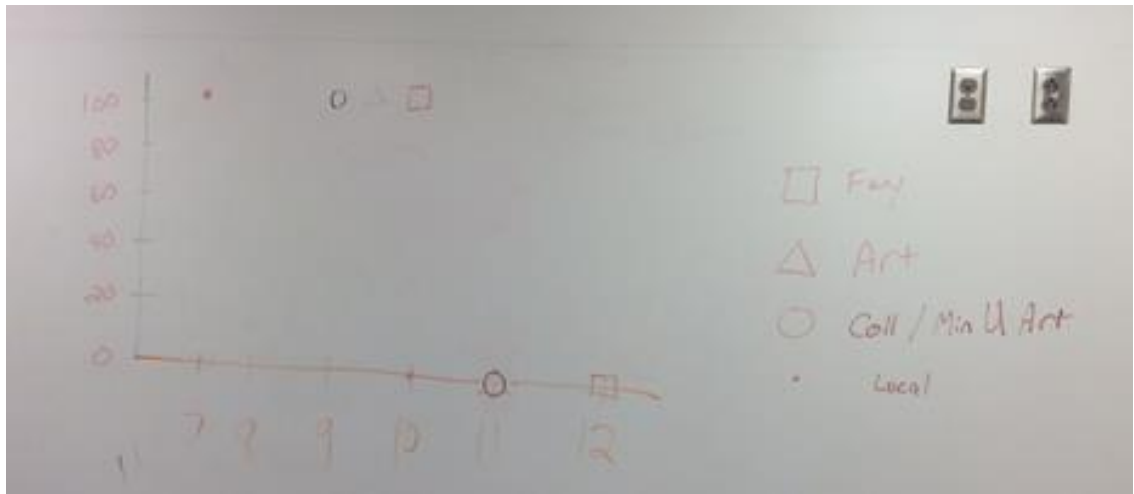
- Began with a review of what has been accomplished to date:
- Reviewed what was expected to be accomplished today – which is to approve
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Green highlighting denotes a vote/agreement on an issue from the Working Group

Roadway Characteristics

- Missing stuff
- Thomas Witt began with an explanation of the changes that have been made for the Roadway Characteristics formulas
- Jason and Mike V. discussed that there should be a reasonable process of collecting and maintaining this data
- Discussion about $P_c=0$, none of the example data had bike lanes or parking lanes, the equation might be incorrect? Eileen asked what the correct equation should be
- Thomas: C = cardinal side bike lane + parking lane + shoulder; no data is n the non-cardinal side, no need to divide by 2
- Anthony: proposed new equation: if auxiliary lane isn't 2 or 6 then auxiliary lane width = 0; group agreed
- Discussion moved to median widths; Thomas said the method hasn't changed but the technical working group made it easier; Thomas went through the method
 - Mike V: verifying his understanding: if median barrier = none and width = 0 then it gets full points – is this correct? More points = more attention -- yes
 - Thomas: if there is a turn lane then use the turn lane width
 - Jason: quick curb delineators don't prevent high severity crashes
 - Mike V: they prevent left turns and T-bone crashes
 - Jason: feels it? should be more points than 25; shouldn't be considered a median
 - Mike V: stated that the quick curb is very effective; if points are changed to 50 then the rest of the equation needs to be changed proportionally
 - Discussion continued about barrier-less medians out ranking delineators; Jason felt delineators shouldn't be considered barriers; Mike V: needs to be less than 100 points; Thomas said this only applies to urban areas and doesn't apply to high speed cross-overs
 - Jason agreed it's good – leave as is
- Lane widths; Thomas explained points: functional class, lane width
 - 1 lane, 2-way roads: lane width in HIS is coded at 12' so they're using an effective lane width; can go down as low as 6'
 - Jason: rural, 2-lane principal arterials with 8' lanes – should be 100 points by the time width reaches 8'
 - Thomas: should we have more points for 7' vs 8'? Or both get 100 points?
 - Mike V: search HIS for the minimum lane width for the 3 roadway types; what would you want to fix first? This speaks to the narrow interstate vs a 15' wide bridge with 100 AADT

- Jason: suggested lumping rural collectors **with ?** (blue and orange)
- John: what does the chart need to look like?
- Chad: does it matter as long as we're ranking, not measuring?
- Mike V: need to ask what the minimum lane width should be for that functional class
- Jason: rural principle arterials: 10'; blue line: straight from 11 to 100% at 10'
- Jill: are we setting a precedent for interstates?
- Jason: **maybe a new line for interstates**; this was based on recommended values from AASHTO: semi-truck and trailer is 8' wide
- John: what is intolerable no matter what the width and what is minimally acceptable?



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- Curves: Thomas explained the points; the equation was changed: was straight and now is curved; until we have useable Mandli data we have to fall back to original assumptions about super, doesn't consider vertical curves; AASHTO method
 - Jason: horizontal curves based on an assumption of 6% max, Jason's district uses 8%
 - Discussion: Points for geometric constraint speed, default to target speed
 - Jason: Mtn Parkway has a 55 mph curve and a high crash spot
 - Jill: urban interstates have 55 mph
 - Mike V: add a speed ratio boost
 - Jason: is good with that if there's a method to capture it
 - Eileen: everyone is good? Yes!
- Lane width equation: Thomas: equation will be linear

Decision Lens Survey Results

- Eileen reviewed the how the regional results, compared each area against each other: safety in general/overall got 40% of the score; crash history was more important than roadway characteristics
- Jason: how does this survey compare side by side to our weighting?
- Eileen: the Decision Lens was based on 100, not 70% and didn't include the 30% boosts; showed the spreadsheet with all the projects and how they changed in weights; these were based on the raw scores with the new formulas
- Jason: suggested that each region uses the same formulas but different weights as long as each district within the region agrees on the weights; in his region, economic development is more important than congestion
- Amanda: suggested that the regions agree on the weights prior to scoring

- John: elaborated on the NC version of weighting (?)
- Eileen and Mike V: are both amenable to this idea
- Jason and John: debated about the ADD involvement in changing the weights
- Stacey: suggested allowing input/survey from the ADDs and MPOs then the 3 districts consider the input prior to making a final decision
- Eileen: the decision is to use Amanda's parameters of the regions agreeing on weights prior to scoring and if consensus cannot be reached then the weights default back to the original.
- Eileen: Decision Lens allows for separate folders and weights; easy to do this; 30% local must stay
- Mike V: can you do a Decision Lens survey for each region? Yes.

Data/Scoring

- Eileen: clarified that only the regional weights could be changed with consensus; the statewide weights will remain the same
- Chad: asked if the new improvement types were included; Eileen: yes

Weights

- Mike V: suggested moving the benefit/cost to 15% and the crash history to 20%
- Jason: felt the B/C should remain high as we need to get the highest return on our investment; concerned about over weighing safety as it is in several spots; but Decision Lens supports this; B/C is 50/50 safety so safety is actually getting 35%
- Mike V: supports keeping current weighting as it's close to the Decision Lens survey
- Jason: did the Advisory Committee have any feedback about the weights? John and Eileen: not really
- Amanda: the Advisory Committee members were mostly concerned about localized congestion
- John: explained that the Advisory Committee was informed that these short-term congestion needs (i.e. school related congestion) are best captured by the local boosts
- Amanda: the statewide economic and freight components seem out of line with the survey – do we want to relook at them?
- Scott: the 5% economic component is negligible
- All agreed that engineers and legislators look at this differently
- Stacey: is 5% for roadway characteristics appropriate?
- Mike V: it's crash risk, systemic approach
- Stacey: take 5% off congestion and put towards roadway characteristics?
- Jason: take crash history down 10% and increase roadway characteristics 10%?
- Mike V: crash filter concept; poor roadway characteristics is a spot waiting for crashes
- Jill: when you improve roadway characteristics speed increases and there are more crashes; still want to fix roads that have crashes vs where we might have crashes
- Mike V: you are moving the crashes form one location to another
- Eileen: the new method measures excess expected crashes so do we want to change the weight based on that?
- Amanda: this discussion shows that crash history is important; 15/5 or 12.5/7.5?
- Scott: if we weight higher on roadway characteristics which includes safety, seems to be more holistic approach
- Mike V: Minnesota is at the top of crash rate reduction and systematically looks at roadway characteristics

- Travis T: doesn't see it changing; if you increase the weight for congestion, his rural counties compete less
- Mike V: to balance the effect (Jefferson Co. vs all other D5 counties), increase roadway characteristics and reduce congestion

Eileen: what about asset management?

- Jason: we have to maintain what we have
- All: wouldn't lower it
- Josh: if you don't do asset management you won't have anything else
- Jill: feels asset management needs more funding and it should be separate
- Chad: wait until the asset management score is high if it's just congestion
- Nathan: do 10% across the board and let the regions add or subtract 5%?
- Eileen: suggested leaving it as it is for now
- Amanda: we don't build projects to manage our assets
- Jason: when we build a project it also saves money on asset management
- Amanda: likes the weights as they are but is willing to change
- Travis T: suggested allowing the regions to adjust the weights by +/- 5% but not allowed to zero any one component out
- Charles: pointed out the difficulty for this Working Group to agree on a change; imagine the difficulty with the ADDS/MPOs/Districts
- **Recommendation from group: keep it the same**

Concluding discussions:

- Eileen: she will email out what hasn't been covered yet
- Pg 4: updated economic growth improvement types: now only 2 that are ineligible
- Asset Management team has listed eligible improvement types
- Scores handed out include the new improvement types
- Nathan regarding the primary vs secondary improvement types
 - Researched across multiple CMFs
 - There's a crash analysis segmentation process that should be used that we don't have
 - The person putting the project into their system says from A to B we're doing this, from B to C we're doing that, etc; not identifying primary and secondary improvement types; they're doing this for 400 projects statewide, not thousands; they may wait until the projects reach Design-level then rank them
 - Not out of the realm for 2022, but we can't do this yet
 - Eileen tried to use ____ and the score moved a point or 2, but not a layer of influence
 - Mike V: only possible secondary is adding bike/ped improvements as a yes/no; only other way is to segment
 - Jill: agrees as bike/ped increases the cost without a measurable benefit; only example she can think of
 - Jill: perhaps a 2-stage review? Once we get a manageable number of projects then we look at segmentation
 - Amanda: remove sidewalk costs so it doesn't impact B/C; in CHAF:
 - Do you have bike/ped?
 - How much does it cost?

- Remove costs from B/C ratio
 - Mike V: can't capture the benefit so shouldn't be penalized for the cost
 - Jason: someone will have to check everything; Mike V: should be a logic check
 - Eileen: we're reviewing every estimate and improvement type already
 - Jason: difficult to single out costs for utilities;
 - Travis T: too many variable unless it's the final design
 - John: supportive of doing a regional per mile estimate for bike/ped
- John: will send a list of committed projects, which are those that have RUC in the biennium and went through SHIFT
- Jason: then we'll be submitting the same number of projects; thinks that the number of projects everyone can sponsor should go down
- John: if your local officials want to sponsor the old projects then let them – they need to hear they're being heard
- Pizza came – end of discussions