



Centre County Long-Range Transportation Plan 2050

Appendix F

Technical Memorandum: Gap Analysis



MEMORANDUM

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To: Tom Zilla

From: Tim Preece

Subject: LRTP 2050 Gap Analysis

CC: Anne Messner, Michelle Brummer

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Project: Centre County MPO LRTP Update

This memo describes a “gap analysis” conducted as part of the process to update the current LRTP 2044, which was prepared in 2015 and last updated in 2018. A “gap analysis” compares the current Plan with the existing conditions, trends, and goals and objectives to identify potential gaps in the Plan – that is, places where the current Plan may not fully accomplish the stated goals and objectives. This analysis is intended as input for consideration as the MPO considers the appropriate strategies and projects for evaluation.

The LRTP 2044 included much analysis and consideration of specific projects and programs intended to address the Plan’s identified goals and objectives. Some of those projects have been completed or are underway. In addition to re-prioritizing the remaining projects from the 2044 Plan, the LRTP 2050 will also revisit the goals and objectives and identify potential additional strategies or projects which are appropriate to close any gaps between the Plan and the transportation vision (i.e. the goals and objectives). This analysis is arranged following the five LRTP Key Questions and related Goals and identifies for consideration previously identified but unfunded projects as well as some suggestions for potential additional strategies.

Gap Analysis:

1. Is the Centre County transportation system getting safer? (corresponds to LRTP Goal 1)

- The Project Ranking Committee for the LRTP 2044 scored 89 projects against the LRTP goals using the Likert Scale. Projects were scored according to their importance toward achieving LRTP goals as follows:
 - Very important = 3
 - Important = 2
 - Slightly important = 1
 - No important = 0

Of the 89 projects scored, more than one third (36 projects) were rated as being “important” or “very important” in addressing Goal 1. These projects include intersection and interchange improvements, traffic signals, roadway geometry and/or ditch improvements, and roadway widening. Significant funds are committed to the I-80/I-99 Interchange project, which addresses an interstate safety need. There are also significant funds dedicated to the US 322 corridor, which will provide safety as well as capacity improvements. There is also line item funding for Safety. So, in the current LRTP there is clearly a focus on identifying projects for safety improvement.

- Crash data for Centre County shows downward trends for total crashes, fatal crashes and pedestrian crashes. The trend for reported bicycle crashes (admittedly a relatively small sample size) is essentially flat, while the statewide trend for bicycle crashes is downward. Although the

total fatal crash rate compares favorably with statewide averages, the rate for specific types of fatal crashes are slightly higher for running off the road or hitting fixed objects, as you might expect in rural and mountainous terrain.

- Takeaways ->
 - Programmatically, the current plan has significant focus on safety.
 - Overall, the total number of crashes and fatalities compares well to statewide averages and is trending downward, likely due in part to investments in safety.
 - Consider inclusion of “Projects For Future Consideration” and projects “Outside of Fiscal Constraint” from current plan:
 - Completion of US 322 corridor from Potters Mills to I-80/99
 - US 322 Corridor O-1 from Worth Township near Port Matilda to Graham Township in Clearfield County
 - H-29 - College Avenue-University Drive Intersection
 - H-30 – SR 192 Corridor Safety Improvements Study
 - H-32 – SR 350/Stahl’s Lane Extension
 - H-36 – SR 550/Rock Road grade and sight distance improvement
 - H-38 – SR 322 street lighting
 - H-40 – SR 322 grade and sight distance improvement
 - H-43 – SR 322 speed limit and signs
 - H-44 – SR 144/Short Road/Bible Road intersection alignment and sight distance improvement
 - H-46 – SR 322 roadside ditch safety improvement
 - H-48 – SR 550 reduce sharp curves
 - Consider increased focus on rural roadway safety. Programs might include:
 - Review/update of rural design standards, or
 - Line item budgeting for rural safety projects
 - Consider increased focus on bicycle safety. Programs might include:
 - Line item budgeting for bicycle facility projects,
 - Review of complete street policies and practices,
 - Public education programs on safe biking and safe driving, or
 - Programs to encourage use of bicycle safety gear (helmets, lights and reflectors)

2. Is the Centre County transportation system in a state of good repair? (corresponds to LRTP Goal 2)

- The LRTP 2044 committed a significant portion of funding toward state of good repair, especially to bridge maintenance, rehabilitation or replacement and routine resurfacing. The 2015-2018 Transportation Improvement Program (TIP) included 26 bridge projects of the total 64 projects in the TIP. Half of the transit items were related to maintenance and vehicle replacement. And, the current FY 2019-2022 TIP continues to focus on bridge projects, funding 32 bridge projects (20 carryover projects plus 12 new projects) plus six bridge line items. And, line items funding for pavement resurfacing is typically about \$2 million/year.
- Most recently available PennDOT inventory data shows 13 out of 276 NHS system bridges in Centre County are rated as “poor”. It shows 0.8% of interstate lane miles and 8.65% of non-



interstates NHS lane miles to have pavements rated as “poor”. These numbers compare favorably to statewide averages.

- Takeaways ->
 - Programmatically, the current plan has significant focus on state of good repair, especially in regard to bridges. Recommend this to continue.
 - Overall, the condition of the total number of bridges and total miles of roadways compares favorably to statewide averages.
 - Consider inclusion of “Projects For Future Consideration” and projects “Outside of Fiscal Constraint” from current plan:
 - H-37 – Ninth Street traffic signal replacement
 - Consider Act 89 optional \$5 vehicle registration fee to help fund needed ongoing maintenance.

3. Does the Centre County transportation system have adequate capacity? (corresponds to LRTP Goals 3 and 5)

- Of the 89 projects scored previously by the Project Ranking Committee, 24 were rated as being “important” or “very important” for Goal 3 (Efficient Management) and 20 were rated as being “important” or “very important” for Goal 5 (Accessibility and Mobility).
- Several significant projects in the current Plan will address roadway capacity as well as safety needs – in particular, the US 322 corridor projects, I-80/99 high speed interchange projects, and E Park Avenue corridor project.
- The results of the travel model projections for year 2050 with only the Existing + Committed (E+C) projects shows increased congestion on many corridors, including along US 322 to the east and to the west of State College; along I-99 just west of US 322; on East Park Avenue; and on downtown streets in State College.
- Additional transit capacity and service coverage is needed but is not funded in the current Plan.
- Takeaways ->
 - The Plan contains a relatively small number of roadway capacity projects, but those it does include are located in areas of high need. It is likely that additional funding is needed to complete those needs already identified.
 - Current transit services are in relatively high demand and additional capacity should be considered.
 - Consider inclusion of “Projects For Future Consideration” and projects “Outside of Fiscal Constraint” from current plan:
 - Completion of US 322 corridor from Potters Mills to I-80/99
 - US 322 Corridor O-1 from Worth Township near Port Matilda to Graham Township in Clearfield County
 - SR 26 betterment and interchange. This project aligns well with the projected location of future job growth and population growth in the broad corridor between State College and Bellefonte.
 - H-31 – Fox Hill and Cricklewood left-turn lane
 - H-41 – SR 45/Wagner Road Extension
 - H-42 – East Branch Road widening and center turn lane



- Consider inclusion of program of projects to expand both the capacity and the service area for transit services to keep pace with demand.

4. Does the Centre County transportation system have an adequate mix of modes? (corresponds to LRTP Goals 4 and 5)

- Centre County is served by an extensive roadway network, fixed route transit (**CATABUS** Community Service and Campus LOOP and LINK), paratransit and senior transportation (**CATARIDE** and CCOT), vanpool and carpool services (**CATACOMMUTE**), sidewalks and multi-use trails, and a range of privately-operated shuttles and on-demand services (taxi, Hershey Shuttle, Uber/Lyft, etc.).
- Since 2015, Centre Area Transportation Authority has expended its transit maintenance facility and replaced many of its vehicles as they've aged. Continued maintenance and vehicle replacement are planned in the current LRTP in future years. The CATA service is heavily used, to the point that some bus routes are operating beyond their intended capacity (standing room only). And, while the current LRTP plans for continued maintenance and operating items, there is no currently planned expansion or increase of services.
- Sidewalks are generally provided in the urban areas and are increasingly a required element of new developments and of roadway improvement projects. While a comprehensive inventory of sidewalks is not available, gaps in the existing network are evident.
- Multi-use and bicycle facilities have been constructed along a number of corridors. And, the Centre region has been actively improving both systems and services for bicyclists – including achieving a Bronze Level Bicycle Friendly Community level by the League of American Bicyclists. But, there is still much to be done when one considers Centre County's large size and extensive roadway network. The current LRTP shows the Centre region bicycle facilities as well as the Centre County Recreation and Greenway Plan – both showing a vision for a well-connected system.
- Of the 89 projects scored previously by the Project Ranking Committee, 30 were rated as being “important” or “very important” for Goal 4 (Integration and Connectivity) and 20 were rated as being “important” or “very important” for Goal 5 (Accessibility and Mobility).
- Takeaways ->
 - Current transit services are in relatively high demand and additional capacity should be considered.
 - Comprehensive plans for sidewalks, bicycle facilities and trails have been identified, but lack funding to implement.

5. Does Centre County's transportation system support existing and future community and economic development needs? (corresponds to LRTP Goals 6,7 and 8)

- Of the 89 projects scored previously by the Project Ranking Committee, only 5 were rated as being “important” or “very important” for Goal 8 (Consistency with Planned Growth and Development Areas). These included an intersection project, a trail project and several corridor projects.



- Although there is much economic development information available (through Comprehensive Plans, 2017 Economic Assessment, Site Finder, local Economic Development organizations and local governments) the available input data seem to lack specific transportation needs from which to better identify complementary transportation strategies and/or projects.
- Takeaways ->
 - The current LRTP contains few projects identified as addressing Goal 8 (complementary with community or economic development goals)
 - Consider inclusion of “Projects For Future Consideration” and projects “Outside of Fiscal Constraint” from current plan:
 - H-34 – College Avenue Flooding Mitigation
 - The current data available seem to lack the specifics that would enable the LRTP process to better identify complementary transportation strategies. For example, a map of growth focus areas would be helpful. Or, a list of important transportation characteristics for the top five job growth markets would also be extremely helpful. Consider a future initiative to engage economic development professionals in assisting to identify specific actionable transportation strategies based on their knowledge of economic development opportunities.

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