

City Council



COMMUNITY & ECONOMIC DEVELOPMENT PRESENTATIONS

OCTOBER 18, 2022

Sensitive Lands Evaluation & Development Standards (SLEDS)

INTRODUCTORY DISCUSSION

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Background / Timeline

Technical update to existing SLEDS Ordinance

Ordinance regulates the following hazards (no new hazard types are proposed):

- Surface fault rupture (earthquake)
- Slope stability & landslide
- Liquefaction
- Debris flow / alluvial fan
- Rockfall
- Groundwater source protection
- Riparian corridor and watershed (listed in current ordinance, but without detailed standards)

Background / Timeline

Technical staff review and update began in 2019

Primary purpose – update all standards to the highest and best practice for identifying, studying, and mitigating hazards in the city (particularly during new development activities)

Recommendations come from various experts:

- GeoStrata (city geology/geotechnical consultant)
- City staff
- FEMA
- Army Corps of Engineers
- USFS
- Utah Geologic Survey
- Fault experts
- SLCO Flood control
- Environmental protection experts at the University of Utah

Background / Timeline

Formal discussion and public hearings held by Planning Commission began January 2022 (numerous preliminary discussions previously)

Planning Commission voted to recommend APPROVAL (4-3) in August 2022

- Numerous updates were made based on PC feedback and recommendations

Public Noticing:

- Formal notices posted online
- Ordinance drafts/staff reports/minutes/etc. always available on city website
- Multiple city newsletter articles

Changes Made Since Planning Commission

Clarified language regarding SLEDs review Procedure

- Previously proposed updated procedure language
- Reverted to same procedure language in current code

Updated Riparian Protection Standards

- Added clarifying language enabling regulatory agencies proper access to do maintenance/improvement work
- Added clarifying language to ensure existing properties may continue reasonable maintenance activities, and clarifying how such activities may be done

Purpose

Original purpose of ordinance has been retained

- Development regulated in a manner that will 'reasonably preserve natural scenic beauty and ecological integrity'

Additional purpose provisions have also been added

New provisions:

- 'protect and promote the health, safety, and welfare of the citizens of Cottonwood Heights City, to encourage wise land use, to protect Cottonwood Heights City's infrastructure and financial health, and to minimize potential adverse effects of geologic hazards to public health, safety, and property.'
- Enumeration of regulated hazards and requirements

Scope & Application

Section has been removed. All language contained in this section has been moved to another section or deleted:

- 'Application,' 'Supplemental and Conflicting Provisions,' and 'Geologic Hazards studies' have been moved to other sections
- Ability of CED Director to declare that a proposed development area does not qualify as sensitive lands has been removed
- Descriptions of appendices have been removed (each appendix is still part of the ordinance)

Definitions

New Definitions

Activity class of faults

Alluvial fan

Hazardous fault

Infrastructure

Riparian-related definitions added

Notable Definition Updates

City

- 'for purposes of this chapter and unless otherwise specified, all decisions, approvals, and recommendations by the city shall be made by the DRC'

DRC

- DRC membership approved by City Council 'by resolution once each calendar year'

Development

- Added roads and removed utilities from definition

Engineering geologist / geotechnical engineer

Structure designed for human occupancy

Applicability

Previously addressed in the 'Scope and Application' section but has been expanded and moved to its own section. Includes:

- Clarification that the sensitive lands requirements apply to all lands located in Cottonwood Heights that contain or potentially contain a regulated hazard
- Added clarification on IBC Risk Category III and IV buildings. These include buildings that represent a substantial hazard to human life in event of failure (schools, utility stations, hospitals, fire and police stations, high-occupancy buildings, etc.)
 - Building classification is important for design and mitigation from various hazards (e.g. fault setback)

Development Standards & Controls

Added clarification to various existing standards:

Slopes

- No grading, retaining walls, or structures allowed on steep slopes
- Exceptions for slope areas under two acres that are not connected to a larger slope area and are not natural slopes east of Wasatch Boulevard

Single Family Lots

- Clarification on measurement of minimum buildable area requirement
- Areas outside minimum setbacks cannot count as buildable area

Maximum Impervious Surface

- Addition requiring geotechnical reports to establish maximum allowed amount of impervious surface in areas where mitigation can occur through reduction in water infiltration

Development Standards & Controls

Added clarification to various existing standards:

Earthwork

- Clarification that requirements apply unless otherwise recommended by a qualified engineer
- Standards for structure fill have been updated to ASTM D1557 (commonly accepted professional standard for soil compaction)

Vegetation & Revegetation

- Added requirement for vegetation plans to be submitted with details on the proposed species, location, quantity, and irrigation

Streets & Ways

- Removed maximum impervious surface requirement for streets and roadways
- Added requirement for developments to provide pedestrian and vehicular connectivity

Development Standards & Controls

Added clarification to various existing standards:

Architectural Design

- Removed Planning Commission from existing ARC review process.

Subdivision Plats

- Clarifies that all subdivisions in SLEDs areas must include a designation of such on the recorded plat (existing provision relocated to this section)

Minimum Acceptable Qualifications

Updated requirements for geologists and engineers to requirements for appropriate degrees from accredited colleges/universities and at least five years of experience in the field

Other professionals must have an active Utah license in their respective field or otherwise demonstrate competence as acceptable to the city

Procedure / Preliminary Activities

Originally proposed updates to this section

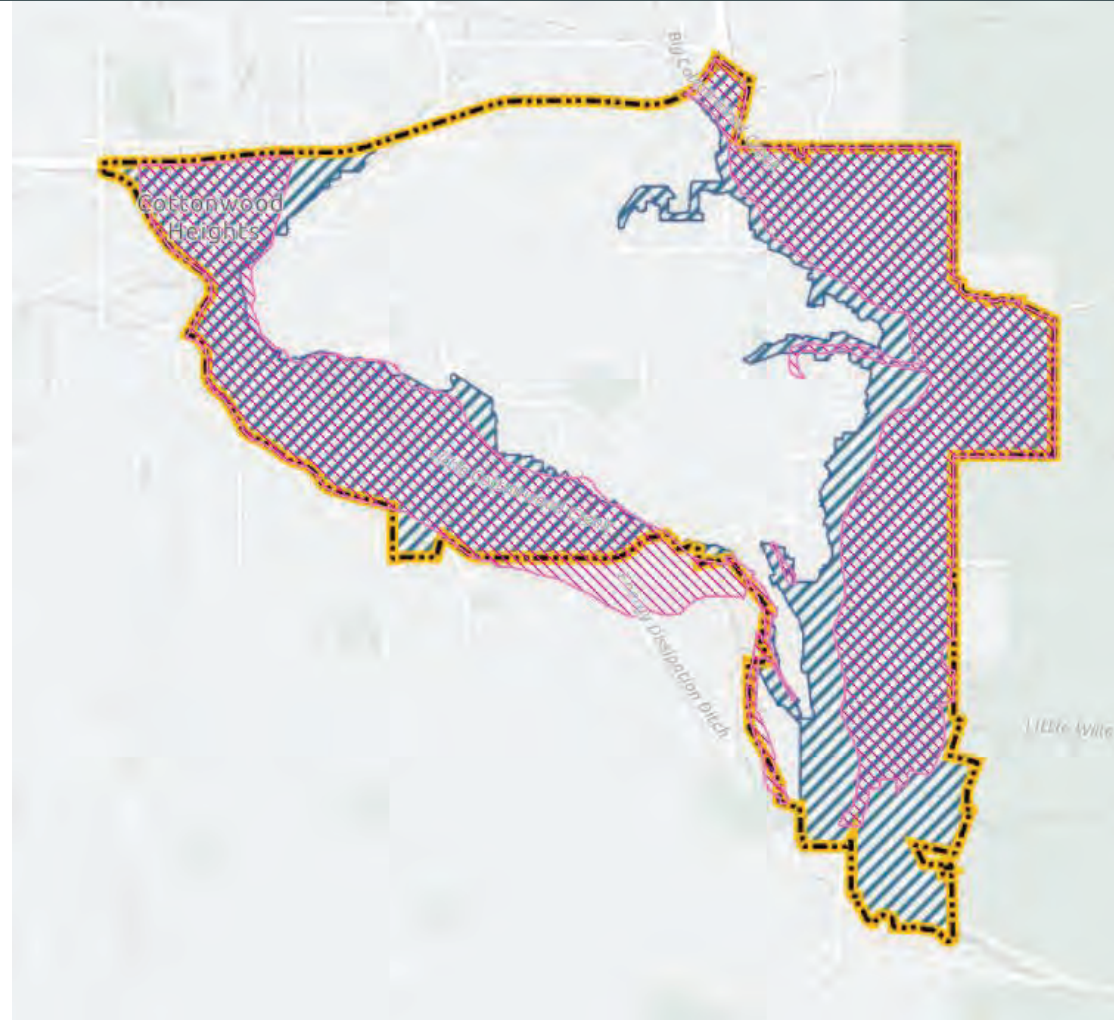
Current proposed ordinance eliminates proposed changes and utilizes existing 'Procedure' language

- Scoping study → conceptual proposal/permit request → preliminary proposal → final approval
- Includes detailed requirements for scoping meetings, disturbance permits, conceptual plans, survey/staking/bond requirements, reclamation plans, etc.

Geologic Hazard Study Area Maps

Clarification that city maps contain the official hazard study areas, but that additional areas may include those designated by UGS or where hazards are otherwise observed/suspected

Proposed ordinance also includes updated city hazard maps



Building Permits on Lots Recorded Prior to Effective Ordinance

New proposed section (not in current ordinance)

Building permits for legal lots of record must meet following requirements:

- Statement from civil engineer and structural engineer stating the structure has been designed in accordance with approved geologic/geotechnical reports
- Verification of engineering consultant's liability insurance

Prior to Certificate of Occupancy

- Excavation report must be submitted to city
- City may require verification from an engineer stating that the building complies with reports

Geologic Hazard Reports (Submittal & Review Guidelines)

Added new language specifying that a field review by city is required for test pits, trenches, drilling, etc.

Added requirement for reports to meet the requirements of UGS Circular 128 (industry-accepted document for preparing hazard reports and ordinances)

Added requirement that all reports must be prepared in accordance with Utah Code requirements for professional geologists and engineers

If a final report indicates that no hazards exist on a property, the city *may* revise hazard maps accordingly

Geologic Hazard Reports (Submittal & Review Guidelines)

Requires all reports to include written, stamped certification from professionals as follows:

- Reports meet requirements of SLEDs
- Proposed development does not present an unreasonable or unacceptable risk to health, safety, and welfare of persons or property
- Verification that hazards can be mitigated to a level where risk to human life and damage to property are reduced to an acceptable level
- That hazard will not adversely affect adjacent properties
- Verification of minimum liability insurance coverage

Geologic Hazard Reports (Submittal & Review Guidelines)

Added language requiring city to report to the Division of Occupational and Professional Licensing (DOPL) when a professional report has been found excessively deficient

Requirement for as-built grading plans to be stamped by geotechnical engineer and the engineer that prepared the grading plans

Updated appeals process – appeals of SLEDs-related administrative decisions subject to appeal in accordance with other administrative appeals

Appendix A – Geologic Hazard Study Area Maps

Sensitive lands overlay map updated (shown previously)

Appendix B – Minimum Standards for Surface Fault Rupture Studies

Adds requirement to comply with the standards contained in UGS Circular 128

Adds building code table showing requirements for fault hazard studies based on age of fault and building risk category

- Table establishes minimum fault setback at 20' for single-family residential structures

Appendix C – Minimum Standards for Slope Stability Analyses

Updated hazard maps per UGS

Added requirement for slope stability and landslide reports to conform with UGS Circular 128

Added requirement for soil and rock sampling to be based on ASTM or AASHTO standards

Added requirement for rock slope stability to be based on current rock mechanics practices, with references to accepted methods

Added requirement that slope stability cannot be contingent on uncontrollable factors, such as limiting landscape irrigation

Appendix D – Minimum Standards for Liquefaction

Added new description of liquefaction to introduce section

Added requirement for liquefaction investigations to be performed with any other geotechnical or geologic hazards study prepared in the city

Added table showing factor of safety requirements based on facility type

Added requirement for subsurface investigation

Added requirement for project engineer to provide documentation that the building is designed to be protective of life during and after a seismic event

Appendix E – Minimum Standards for Debris Flow Hazard Studies

Revised the appendix to include new description of debris flow and a requirement to comply with UGS Circular 128

Appendix F – Minimum Standards for Rockfall Hazard Studies

Added new rockfall description, requirement to comply with UGS Circular 128, and reference to UGS data on rockfall hazard areas

Appendix G – Groundwater Source Protection

No changes proposed

Appendix H – Foundation Observation Standards

No changes proposed

Appendix I – Riparian Corridor and Watershed Protection

Hazard is included as a listed natural hazard in current ordinance, but no regulations exist

New regulations have been drafted and proposed

Riparian area – ‘an area including a stream channel or wetland, and the adjacent land where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial and/or intermittent water, associated high water tables, and soils that exhibit some wetness characteristics.’

Proposed Riparian Standards

Purpose

‘to protect and enhance riparian areas within Cottonwood Heights to promote the public health, safety, and welfare. This chapter recognizes these waterways and their adjacent terrestrial ecosystems as local and regional assets in terms of natural function, aesthetic value, recreation, and cultural importance. This chapter aims to enact the following goals:

- Ensure the continuation of natural functions and habitat provided by riparian areas
- Guide development in a way that enhances the riparian corridor
- Improve water quality
- Minimize natural hazards
- Protect aesthetic and recreational values associated with riparian corridor

Proposed Riparian Standards

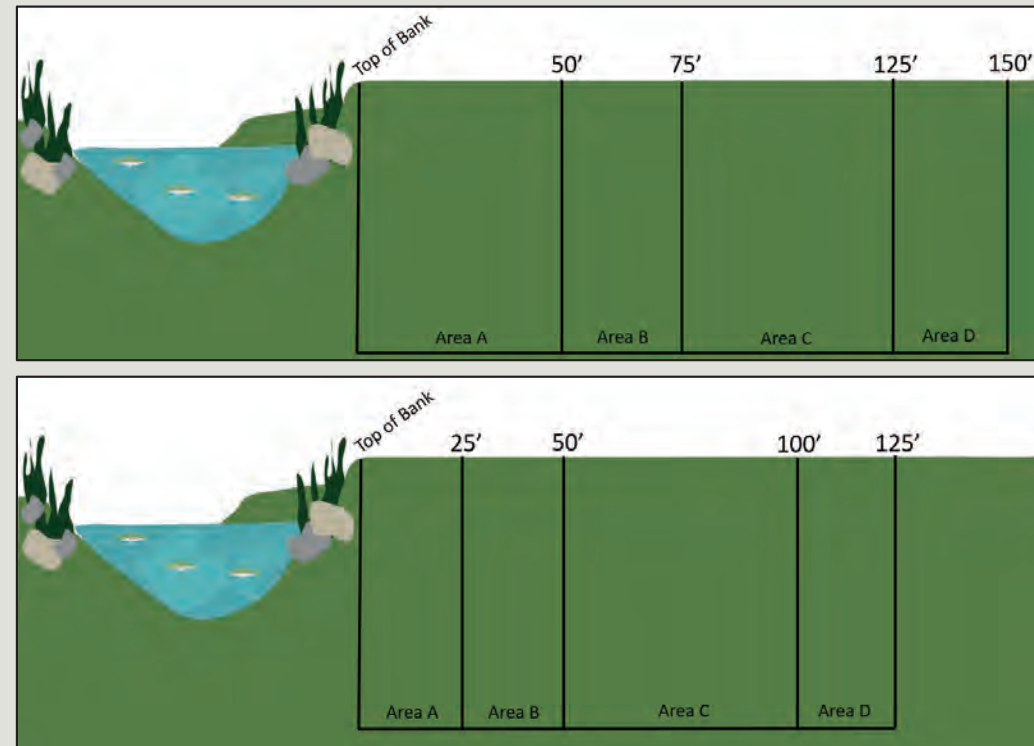
Applicability

Applies to properties within riparian protection area (regulations vary within defined buffer areas)

Does not apply to functions of regulatory agencies conducting necessary operations, or emergency response measures

Proposed Riparian Standards

- Within the **F-20, F-1-43, F-1-21, RR-1-43, RR-1-29, RR-1-21 zones, and CR zones**, the Riparian Protection Area is defined as all areas within 150 feet of the tops of bank of streams, creeks, and other above-ground watercourses.
- Within **all other zones**, the Riparian Protection Area is defined as all areas within 125 feet of the tops of bank of streams, creeks, and other above-ground watercourses.



Riparian Protection Standards

Table of Uses Examples

Proposed table of uses that are either allowed, allowed with review, or prohibited based on proximity to top of waterway banks

Most restrictions apply to new and/or substantial development activities

Maintenance of any existing use and structure is allowed

Removal of hazard/dead trees allowed; removal of healthy trees requires review and additional planting

Certain development activities require DRC review and approval

Mid-Valley Active Transportation (MVAT) Plan

Mid-Valley Active Transportation Plan

- **What is this plan?**

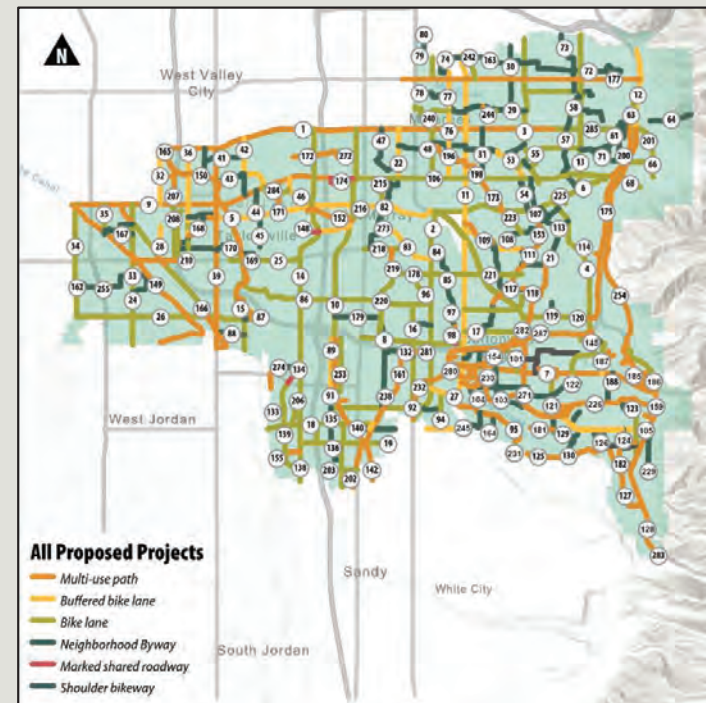
- The Mid-Valley Active Transportation Plan is a regional active transportation master plan for six cities: Cottonwood Heights, Midvale, Taylorsville, Murray, Holladay, and Millcreek.

- **How does a regional transportation plan work?**

- This plan was prepared by Avenue Consultants and sponsored by Wasatch Front Regional Council. Each community has an individual plan document detailing proposed projects in their jurisdiction.

- **How will this plan be adopted?**

- Master plans are adopted by the City Council as individual “elements” of the city’s General Plan. This plan will follow the same process as the Parks, Trails, and Open Space Master Plan, the Bonneville Shoreline Trail Access Master Plan, and the Wasatch Blvd. Master Plan.



VISION:

WORKING TOGETHER ON A CONNECTED
ACTIVE TRANSPORTATION SYSTEM FOR
ALL AGES & ABILITIES.

OVERALL GOALS:

01

Prioritize safe routes
for all users



02

Complete a connected
backbone network



03

Collaborate for public and
multi-city commitment



04

Improve access to key
origins and destinations



Vision & Goals

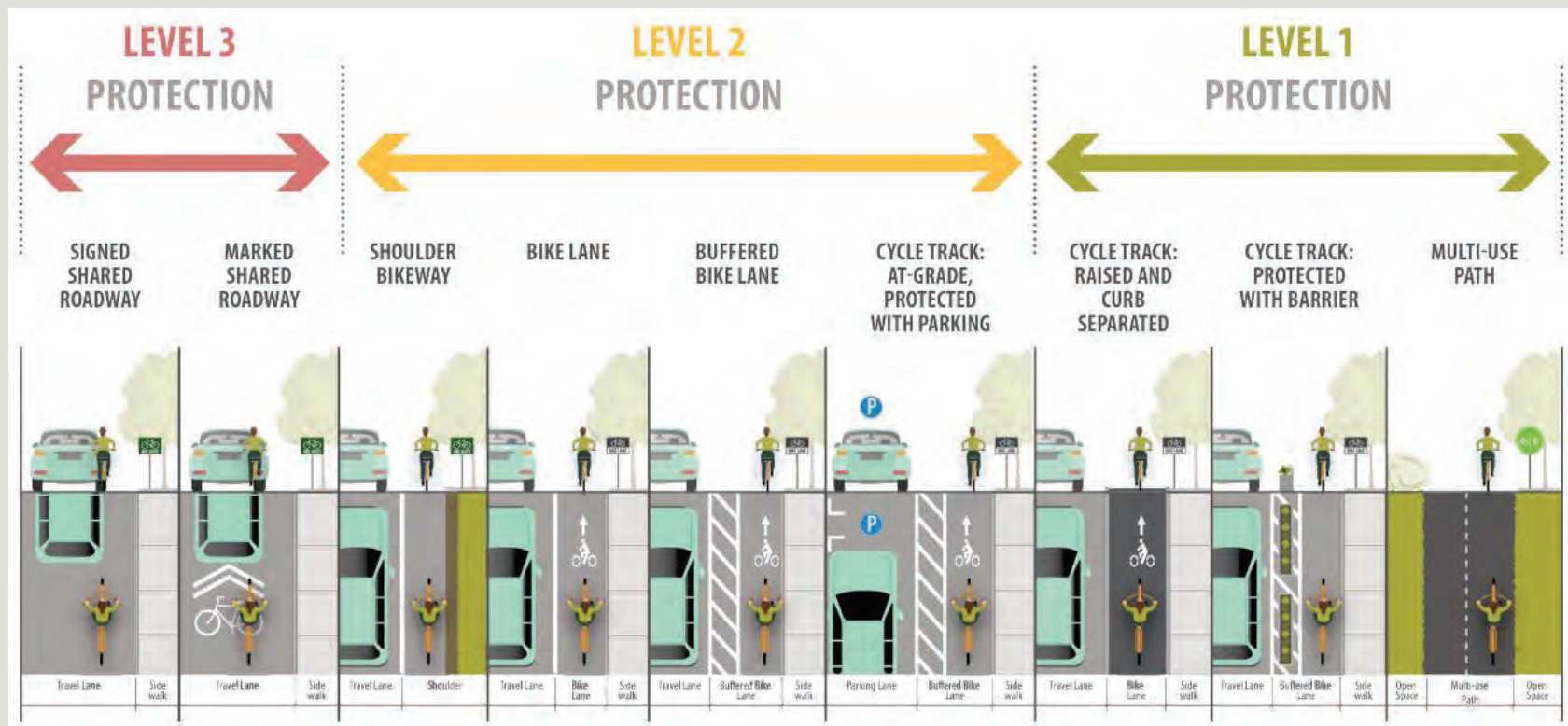
1. Prioritize safe routes for all users
2. Complete a connected backbone network
3. Collaborate for public and multi-city commitment
4. Improve access to key origins and destinations

Plan Preparation

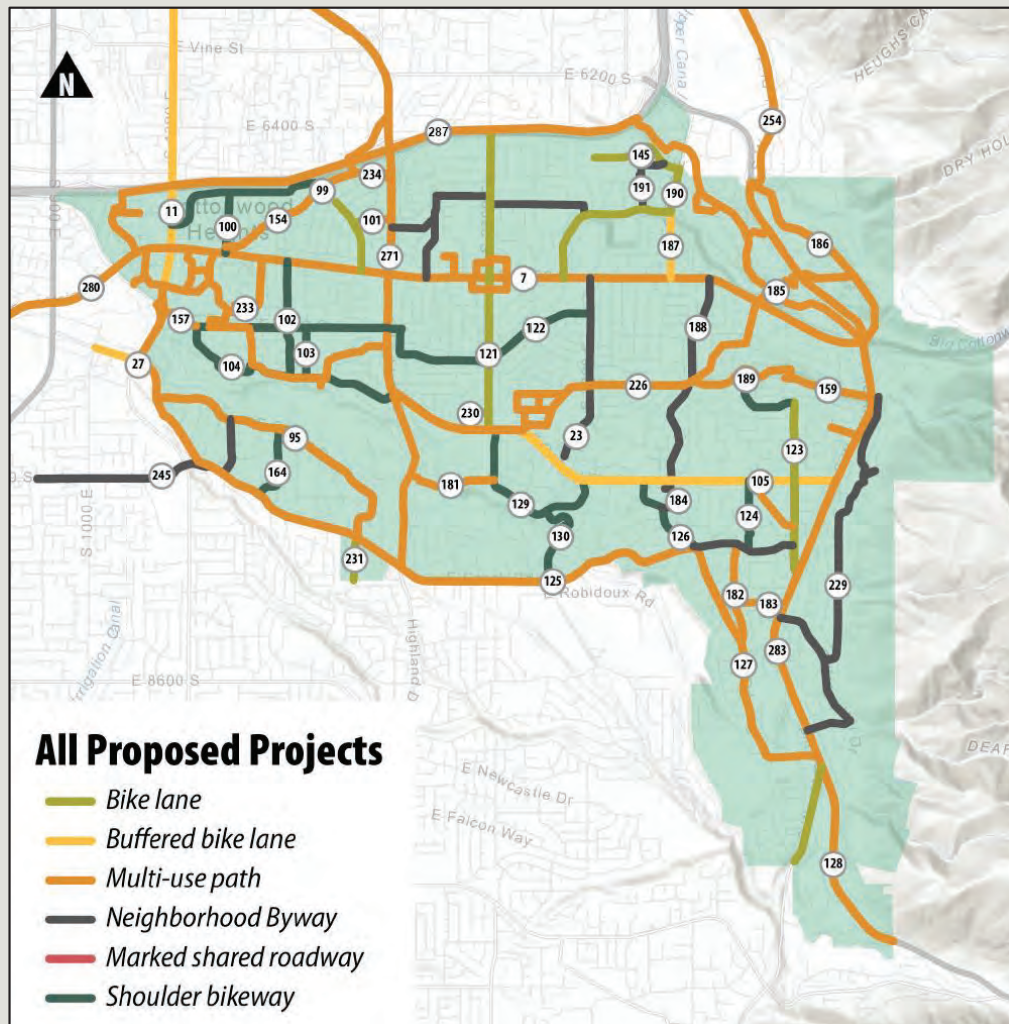
- Starting in 2019, the project team began gathering data and brainstorming ideas using the following methods:
 - Visioning workshops with stakeholders
 - Bike tour of SLC
 - In-person workshops
 - Online surveys
 - Meetings with city staff
- The Planning Commission recommended approval of this plan on Jan. 5, 2022
- City Council presentation – July 2022



Active Transportation Infrastructure



Cottonwood Heights Projects



- 51 total active transportation projects recommended, including 16 multi-use path projects.
- A total of 37.82 miles of active transportation facilities envisioned.
- “Backbone” projects include:
 - Fort Union Blvd.
 - 1300 East
 - 2700 East
 - Highland Dr.
 - Wasatch Blvd.