

# KINGSTON TERRACE EAST/WEST CIRCULATION STUDY OPEN HOUSE October 11, 2022



#### DRAFT MASTER PLAN IMPLEMENTATION STRATEGY





- Identify key multimodal east/west corridors
- Quantitative and Qualitative evaluation based on data focus on differences and consider order of magnitude effects
- Consider key factors from the following categories:
  - Land use and community design
  - Active Mobility
  - Vehicular Mobility
  - Public utilities and services
  - Natural resources
  - Cost and implementation considerations

### **EVALUATION FACTORS**

What are we trying to achieve?

- Support Concept Plan land uses
  - Integrate King City
  - Provide connectivity and access (parks, transit, emergency services)
  - Avoid isolated development patterns
- Spread out traffic on multiple routes
- Encourage shorter travel times and reduce Vehicle Miles of Travel
- Work with topography and avoid high value natural resources
- Provide convenient walking and bicycling routes
- Accommodate public utilities

### **EAST/WEST CIRCULATION STUDY**

#### Washington County

- A parallel collector roadway to Beef Bend Road is necessary for intracity connectivity and mitigation of additional congestion expected along the Beef Bend Road corridor.
- We acknowledge challenges with the increased traffic expected along Beef Bend Road, particularly in the existing urban area where the right-of-way is too constrained for roadway widening.
- As development occurs in the new Kingston Terrace area, having a parallel east-west collector roadway will be important to provide an alternative to using Beef Bend for local trips.

#### **EAST/WEST CIRCULATION STUDY**

- Based on evaluation factors reviewed by SAC/TAC/public.
- Analysis conducted by subject matter experts in each discipline who have familiarity with the study area.
- Planning level analysis using largely readily available information as a starting point.
- Initial results revised to address some SAC/TAC/public comments.
- Evaluation results summarized in short text and with a bullet-based ranking system.
- Analysis results are relative and not absolute.



#### **ALTERNATIVES ANALYSIS**



#### **CONCEPT PLAN – BACKBONE MOBILITY SYSTEM**



#### **CONCEPT PLAN – STREET SYSTEM THAT SUPPORTS THE LAND USES**



 Alignment of alternatives is not fixed. They show a broader "corridor of intention" that will be further refined in the master plan and design/development phases.

 A <u>No Direct Connection (NDC)</u> <u>Scenario</u> was also evaluated, which assumes Alternative 3 alignment to about 150<sup>th</sup> Avenue and then connects directly to Beef Bend Road.
 Only local streets would be provided east of 150<sup>th</sup> Avenue with no connection into the existing city.

#### **RECOMMENDED ALTERNATIVES TO BE STUDIED**

- Western portion of the plan area has larger parcels and less ownership fragmentation.
- Western portion is likely to see larger scale development earlier than the central or eastern portions.
- Will happen as fast as property owners act.

#### PHASE ONE DEVELOPMENT PROGRAM

#### PHASE TWO DEVELOPMENT POTENTIAL



### TIMING AND PHASING (From the Concept Plan)

# Land Use and Community Design

# **Evaluation Factors**

- Support planned land use patterns
- Existing and new neighborhood cohesion
- Serve those with greatest transportation needs and least resources
- Impacts to disadvantaged or marginalized population groups
- Historic/cultural importance
- Effects on quality of access to recreational sites
- Section 6f impacts to recreational sites
- Section 4f impacts to recreational sites

#### LAND USE AND COMMUNITY DESIGN

Evaluation Factors	No Direct	Alternative	Alternative	Alternative 3	Alternative
	Connection	1	2	(S/N)	4
OVERALL RANKING					

- Alternatives 2 and 3 South score highest
- 2 and 3 support land use patterns established in the Concept Plan
- 2 and 3 are central to the study area with a direct easterly connection
- 3 North provides a connection to the north



- 2, 3 & 4 have least impacts to disadvantaged populations and serve future recreation sites
- All build alternatives have some negative impacts to existing communities; NDC scenario has more limited impact unless Beef Bend Road needs widening
- NDC does not support land use patterns or provide good access to recreation sites

#### LAND USE AND COMMUNITY DESIGN

# **Active Transportation Mobility**

# **Evaluation Factors**

- Accommodation of bicycle/ped system for health outcomes
- Safety for bicycle & pedestrian users
- Connectivity to key destinations
- Travel time comparisons for bikes
- Ability to meet spacing standards and limit length of cul-de-sacs/closed end loops
- Supports providing a seamless connection to existing/planned infrastructure in surrounding communities

#### **ACTIVE TRANSPORTATION MOBILITY**

Impact Categories/Criteria	No Direct	Alternative	Alternative	Alternative 3	Alternative
	Connection	1	2	(S/N)	4
OVERALL RANKING					-

- Alternatives 1 and 2 score highest
- All alternatives accommodate safe bicycle and pedestrian facilities, but NDC relies on local streets east of 150<sup>th</sup> and therefore may lack bikeways



- 1 and 2 provide more direct links to the town center, parks/trails, and schools reducing travel time for bikes
- 1, 2 and 3 have designated bikeways and are most able to meet spacing standards and limit the length of cul-de-sacs/closed end loops

### **ACTIVE TRANSPORTATION MOBILITY**

# **Vehicular Transportation Mobility**

# **Evaluation Factors**

- Connectivity & potential for out of direction travel
- Level of service/delays at key intersections
- Travel times/VMT effects
- Beef Bend Road spacing standards
- Transit supportive
- Ability to meet standards to limit long cul-de-sacs/closed end loops
- Provides at least one continuous connection through the study area for all travel modes

### **VEHICULAR TRANSPORTATION MOBILITY**

Evaluation Factors	No Direct Connection	Alternative 1	Alternative 2	Alternative 3 (S/N)	Alternative 4
OVERALL RANKING					

- Alternatives 2 and 3 South score highest
- 1, 2, and 3 provide connectivity and reduce outof-direction travel
- NDC provides poorest connections to the existing city; relies on Beef Bend and local streets built to lower standards



- NDC would see highest traffic volumes on Beef Bend, approaching 3-lane road capacity
- 2 and 3 are best opportunity for continuous connection through the study area for all travel modes, supporting future transit, and limiting long cul-de-sacs/closed end loops

### **VEHICULAR TRANSPORTATION MOBILITY**

# **Public Utilities and Services**

# **Evaluation Factors**

- Stormwater and water quality impacts
- Effect on steep slopes and erosion potential
- Accommodation of emergency services, transit, and school bus routing
- Effect on sanitary sewer including opportunities for co-location
- Effect on potable water including opportunities for co-location
- Effect on franchise utilities such as gas, electric, fiberoptic, etc. including opportunities for co-location

#### **PUBLIC UTILITIES AND SERVICES**

Evaluation Factors	No Direct	Alternative	Alternative	Alternative 3	Alternative
	Connection	1	2	(S/N)	4
OVERALL RANKING	-			60	

- Alternative 2 scores highest
- Central location of 1, 2, and 3 accommodates emergency services and transit (local circulator and potential future TriMet)
- NDC would have least impact on steep slopes and erosion



- 1, 2, and 3 provide opportunities for infrastructure co-location
- NDC has least impacts on steep slopes and erosion, but is poorest in accommodating emergency services and transit, and does not provide opportunities to co-locate infrastructure

### PUBLIC UTILITIES AND SERVICES

# **Natural Resources**

## **Evaluation Factors**

- Wetlands impacts
- Stream-crossings and riparian area impact

NATURAL RESOURCES

- Impacts to upland habitat
- Impacts to wildlife corridors
- Effects on Bankston Easement

Evaluation Factors	No Direct Connection	Alternative 1	Alternative 2	Alternative 3 (S/N)	Alternative 4
OVERALL RANKING					

- No Direct Connection scenario scores highest
- NDC will have little to no impact on wetlands, stream crossings, riparian areas, upland habitat, wildlife corridors, and the Bankston Easement.
- 4 scores highest among alternatives as it is furthest away from most natural resources



• 3 North and 4 do not cross through the Bankston Conservation Easement.

#### **NATURAL RESOURCES**

# **Cost and Implementation**

# **Evaluation Factors**

- Order of magnitude construction costs roadways and bridges/culverts
- Order of magnitude construction costs pathways
- Order of magnitude costs for habitat restoration, stormwater management and erosion control
- Order of magnitude costs for sewer service extensions related to the range of roadway/pathway alternatives
- Potential for funding using TDT or other public resources vs developer financing
- Order of magnitude construction and operations/maintenance effects on public utilities
- Effect of transportation system phasing particularly related to public utilities

### **COST AND IMPLEMENTATION**

Evaluation Factors	No Direct	Alternative	Alternative	Alternative 3	Alternative 4
	Connection	1	2	(S/N)	(S/N)
OVERALL RANKING (Excluding pathway)					

- Alternatives 2 and 3 South score highest, due to lower long-term operations costs and good opportunities to co-locate public utilities
- 2 crosses ravines at wider points so it is more expensive to build than NDC, 4 or 3 South
- 2 requires the least right-of-way acquisition and, with slight modifications, does not require the demolition of existing homes
- 4 crosses ravines at narrowest points, so it is the least expensive to build and has lowest costs for habitat restoration, stormwater management, and erosion control
- 4 is more expensive for sewer service due to the need for pump stations
- NDC has similar strengths and weaknesses to 4; May also require widening of Beef Bend

## **COST AND IMPLEMENTATION**

# **Summary Results**

	No Direct	Alternative	Alternative	Alternative 3	Alternative 4
Impact Categories	Connection	1	2	(S/N)	(S/N)
Land Use and Community Design					
Bicycle, Pedestrian and Micro- mobility	-				-
Vehicular Mobility and Accessibility					
Public Services and Utilities				GO	
Natural Resources					
Costs and Implementation	-				

#### **SUMMARY OF RANKED FACTORS**

- Does not require demolition of existing homes in the study area.
- Requires less linear feet of ROW acquisition due to use of existing roadway ROW.
- Likely to secure public funding from state, regional, county or local sources that would reduce the need for developer funding.
- Maximizes the effectiveness of gravity sewer through co-location of utilities along an optimal elevation for sewage flow.
- Offers a central backbone roadway through the development linking it with the Kingston Terrace Town Center and the existing city.
- Good access to many neighborhoods and new public parks.
- Potential for future local or regional transit service.
- Good connectivity and minimized travel times.
- Minimizes potential for long cul-de-sacs or closed end roadways

#### **ALTERNATIVE 2**

- Alternatives 2 and 3 South rank highest overall.
- Alternative 2 will be carried forward into the master plan.
- Portions of Alternatives 3 & 4 carried forward as neighborhood routes, Alternative 1 as multi-use path.
- Alternatives may be adjusted to accommodate land use, environmental, and other factors during the master plan process.
- Final east/west circulation will be submitted to Planning Commission and City Council for adoption with the Kingston Terrace Master Plan and Transportation System Plan.

#### SUMMARY OF RANKED FACTORS





Kingston Terrace Master Plan King City, Oregon

# **Next Steps**

**Next Steps:** 

- October 19: joint Planning Commission/City Council work
  session
- Mid-November: Draft KTMP anticipated
- December/January: Next round of community engagement







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