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City of North Las Vegas Complete Streets Corridor Ranking Study Evaluation

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City of North Las Vegas
Complete Streets Corridor Ranking Study
Evaluation
MPA Capstone Project
August 2014

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Executive Summary

A Complete Street is a corridor that is accessible by all users and modes of transportation; it promotes livability and economic vitality in the surrounding community, and is a new approach to improving transportation networks. Prior to the implementation of Complete Streets projects, cities conduct corridor ranking studies to determine potential project locations. The City of North Las Vegas Planning Department (CNLV) is currently working on a corridor ranking study in partnership with the Regional Transportation Commission (RTC) and an external consulting group, Atkins International (Atkins). This is the first Complete Streets planning study for the City of North Las Vegas, and they are currently in need of an external evaluation of their approach. DiamoCorp is a consulting group in charge of evaluating the approach the City of North Las Vegas has taken to complete its Complete Streets Corridor Ranking Study. DiamoCorp aims to answer the following question: Was the City of North Las Vegas effective at executing their ranking study? To answer this question, DiamoCorp took a four-tiered approach. The four methods used to evaluate the effectiveness of the study were 1) an internal assessment, 2) benchmark comparisons, 3) workshop analyses, and 4) a stakeholder survey.

1. Internal Assessment: DiamoCorp members met with key stakeholders (CNLV, RTC, Atkins) on a monthly basis in order to discuss the division of roles and responsibilities amongst stakeholders as well as current or potential setbacks.

2. Benchmark Comparisons: Researching similar Complete Streets corridor-ranking studies around the United States allowed DiamoCorp to compare and contrast strengths and weaknesses from this study to others like it across the country.

3. Workshop Analyses: Workshop activities and discussions formed the indicators and ranking criteria for the study; DiamoCorp attended and analyzed the workshops to determine if Atkins was meeting its objectives and progressing in accordance with the study's timeline.

4. Stakeholder Survey: Stakeholders were very involved in the first half of the study, and through a survey DiamoCorp aimed to find out what stakeholders were involved or missing as well as how to maximize the use of stakeholder expertise and time.

DiamoCorp used the information and data they collected to form recommendations for the current study as well as future Complete Streets Corridor Ranking Studies. Together, these recommendations create a toolbox. Recommendations for the study in progress include providing materials from Atkins to stakeholders prior to workshops, discussing workshop materials with CNLV and RTC prior to workshops, looking into best practices of similar ranking studies, and assessing what stakeholders group and data were missing during this study. Below are the recommendations for future studies.

City of North Las Vegas Complete Streets Corridor Ranking Study Toolbox

- **Lessons Learned about Planning Approach:**

In future studies the key players (CNLV and RTC) will remain the same. DiamoCorp recommends

that CNLV hire an external consultant unless there is an increase in CNLV staff available to work on projects. The role of the consultant will not be the same in future studies; rather than conducting workshops during the first half of the project, the consultant will spend that time collecting, organizing, and preparing data that was previously missing or outdated from the first study. Successful Complete Streets studies in cities such as Henderson, Nevada; Oakland, California; and Chicago, Illinois have elements that CNLV can consider when conducting future studies. These elements include: 1) clearly defined leadership roles, 2) public engagement via online or in workshop form, 3) utilization of higher education institutions for research assistance, and 4) information sharing with local stakeholder groups.

- **Workshops & Stakeholder Engagement:**

For future studies, DiamoCorp recommends using the information collected from the pilot study's workshop series to select and rank corridors without moving through the same workshop activities again. After selecting and ranking potential corridors, DiamoCorp recommends that 1) CNLV and the consultant share their findings with stakeholders and ask for feedback. Survey results showed that stakeholders would spend 2-3 hours per week reviewing materials for this study. Hosting one meeting for stakeholders, CNLV, RTC, and the consultant to discuss findings would be sufficient. After receiving stakeholder feedback, 2) the consultant can carry on with the study and compose their final recommendations for the city.

1. Introduction

The National Complete Streets Coalition defines Complete Streets as transportation networks that “are designed and operated to enable safe access for all users, including pedestrians, cyclists, motorists and transit riders of all ages and abilities.” Complete Street designs account for more than traffic volume and land use; they improve safety, accessibility and overall livability for residents and visitors.

During the early 2000s, the City of North Las Vegas was one of the fastest growing cities in the country (Interview with CNLV); today, the city is still growing, but at a slower rate. Now that growth has slowed the City of North Las Vegas has taken an interest in improving its transportation network to better accommodate the city and its residents’ needs. Traditionally, Unified Planning Work Program (UPWP) studies for transportation improvement projects focus solely on automobile volumes and traffic lanes; this study represents a new approach to transportation improvements and considers “livability” in addition to traffic volume.

- **Study Purpose:** to assess and identify candidate corridors for implementation of Complete Street treatments.
- **Study Goal:** to create a distinguished multimodal transportation network that serves all destinations, transportation modes, and users.

The Complete Streets Corridor Ranking Study is a collaboration between The City of North Las Vegas Planning Department (CNLV) and the Regional Transportation Commission (RTC). Since the project is the first of its kind in North Las Vegas, the Planning Department hired an external consultant, Atkins International. This corridor ranking study focuses on engaging stakeholders in a series of workshops to select and prioritize livability indicators in order to identify possible corridors for improvement.

As evaluators, DiamoCorp is interested in the effectiveness of the CNLV's approach to this study and creating a toolbox for similar studies in the future. The evaluation consists of four pieces: an internal assessment; benchmark comparisons to similar Complete Street corridor ranking studies; an analysis on the project workshops; and a survey on stakeholder engagement. The outcomes of this evaluation are recommendations in the form of a toolbox that CNLV can use for future Complete Streets projects.

2. Research Questions

The main research question for this evaluation is how effective is the City of North Las Vegas' approach to perform their Complete Streets Corridor Ranking Study? Specific questions include:

- What were the roles and responsibilities of the Complete Streets Corridor Ranking Study leaders (e.g., RTC, CNLV, Atkins)?
- What issues prevented or slowed the study's progress (e.g., data, politics, time)?
- Did the City of North Las Vegas take an effective approach to ranking criteria compared to successful benchmark studies?
- Would community involvement be a more effective approach in criteria ranking?

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- What were the outcomes of the workshops?
- Did stakeholders find the workshops productive and useful of their time?

3. Methodology

A brief summary of the four methods DiamoCorp used for analysis is below. Detailed information about each approach is provided in the following paragraphs. 1) Internal Assessment: DiamoCorp members met with key stakeholders (CNLV, RTC, Atkins) on a monthly basis in order to discuss the division of roles and responsibilities amongst stakeholders as well as current or potential setbacks. 2) Benchmark Comparisons: Researching similar Complete Streets corridor-ranking studies allowed DiamoCorp to compare and contrast strengths/weaknesses from this study to others like it across the country. 3) Workshop Analyses: Workshop activities and discussions formed the indicators and ranking criteria for the study; DiamoCorp attended and analyzed the workshops to determine if Atkins was meeting its objectives and progressing in accordance with the study's timeline. 4) Stakeholder Survey: Stakeholders were very involved in the first half of the study, and through a survey DiamoCorp aimed to find out what stakeholders were involved or missing as well as how to maximize the use of stakeholder expertise and time.

3.1 Internal Assessment

To better understand the roles and responsibilities associated with the study, DiamoCorp met with representatives from the City of North Las Vegas Planning Department, Atkins International, and the Regional Transportation Commission on a monthly basis. Prior to each meeting DiamoCorp prepared questions about the study's progress, possible issues or setbacks, and the distribution of

responsibilities amongst the three entities. Examples of interview questions include “How often do you communicate with RTC/CNLV/RTC?” and “What is the breakdown of responsibilities between RTC/CNLV/RTC?” More question examples are available in the appendix. Identification of issues and roles developed through discussions between DiamoCorp members after meetings with stakeholders.

3.2 Case Studies

A relative approach to analyzing the validity of the City of North Las Vegas’ planning process is to utilize data from cities that previously implemented Complete Streets policies. DiamoCorp researched data primarily through Internet search engines and sources sent from CNLV and RTC. DiamoCorp analyzed case studies for Complete Streets projects done in various locations throughout the United States of America. Reviewing case studies for a variety of elements allowed DiamoCorp to compare CNLV’s Complete Streets studies to similar studies. Tables 1, 2, 3, and 4 on the following pages define and give a quick overview of the terms used to evaluate the case studies. Through these comparisons, DiamoCorps aims to determine which study elements might enhance current approaches and improve future planning processes for the City of North Las Vegas.

The following breakdown of definitions and categories provides the necessary understanding on the process of the similar case studies. First, each case study is ranked by the major categories, which consist of stakeholders (Table 1), workshops (Table 2), ranking methods (Table 3) and the environment (Table 4). Then, those categories are broken down based on their individual involvement with subcategories as described.

Table 1. Stakeholder Types for Complete Street Project Case Studies

Stakeholders	Definitions
Non-governmental Organizations/ Nonprofit Organizations	A non-governmental organization (NGO) is any non-profit, voluntary citizens' group, organized on a local, national or international level.
Government – Local	An administrative body for a small geographic area, such as a city, town, county, or state.
Government - Regional	An administrative division or country subdivision; is a portion of a country or other region delineated for the purpose of administration.
Private Organizations	Any person, partnership, corporation, association or agency, which is not a public body that is operated for profit.
Public Sector Organizations	Consists of governments and all publicly controlled or publicly funded agencies, enterprises, and other entities that deliver public programs, goods, or services.
Citizen’s Engagement – Extensive	Citizen involvement from the beginning (i.e. creating policies and evaluation process).
Citizen’s Engagement – Minimal	Some citizen involvement during the evaluation process.
Citizen’s Engagement - None	No citizen involvement during evaluation process or at all.

Table 2. Workshop Features for Complete Street Project Case Studies

Workshops	Definitions
Clear Defined Leadership	Organizational chart of committee/stakeholders of their duties and responsibilities outlined.
Mission Statement	Created prior to or in the 1 st meeting to be used a guide for workshops by attendees.
Timeline on Schedule	Timeline maintain as defined in scope of work.
Timeline Adjustments	Any adjustments made to the original timeline defined in scope of work.
Corridor	Corridors were ranked at workshops and not already pre-selected (therefore,

	moving directly to design process).
Guiding Principles	Overall objectives to be used as a guide in ranking process.

Source: Developed by authors through internal review on case studies

Table 3. Ranking Methods Employed for Complete Street Project Case Studies

Ranking Methods	Definitions
Survey	Stakeholders and/or community ability to address community concerns and outcomes by attending meetings and/or workshops.
Workshops	Education sessions created to assist in evaluation process.
See Click Fix App	International mobile app and internet web based access that allows all users to address dangerous and unsafe multi-modal areas by filing a grievance and snapping a picture.
Online Survey	Absentee stakeholders and chosen community members able to address concerns by rating and open-ended questions.
Real-time Polling System	Questions asked to stakeholders to assist in prioritization criteria ranking of corridors.
Community Outreach	Community attended workshops as stakeholders.

Source: Developed by authors through internal review on case studies

Table 4. Project Environment for Complete Street Project Case Studies

Environment	Definitions
Readiness	Capacity to manage project and contingencies.
Funding	Budgeted capital provided by government and some financial support from governing agency for project funding.
Successful	Created effective policies, evaluation planning and implementation. Ranked as one of the top ten Complete Streets.
Transparency	Stakeholder and community awareness, as well as provide community education to all users of all ages.

Source: Developed by authors through internal review on case studies

DiamoCorp created a matrix to complete a gap analysis with comparable case studies (see Appendix). Each case study presented several aspects or tools that were helpful in their particular planning process. DiamoCorp viewed some of these aspects as missing factors in guiding CNLV's approach. The primary goal of the benchmark studies was to showcase any tools that can be used to improve current and future Complete Streets projects or studies. DiamoCorp articulated its findings by correlating defined terms with information from the top three case studies and by giving a brief overview of other viable factors used in top three but not found in CNLV's current approach.

3.3 Workshop Analysis

CNLV worked with Atkins to help plan and organize workshops required for the study's success. Along with Atkins there are several stakeholders who were actively involved and wanted their input to be heard. In order to gain insight about community wants and needs there were five scheduled workshops. Workshops allowed each stakeholder to represent different sectors of the community and provide input on how the streets of North Las Vegas can be improved. DiamoCorp focused part of their evaluation on these workshops to distinguish whether or not they are effective at achieving the goals of the Complete Streets Corridor Ranking Study.

3.4 Stakeholder Engagement

DiamoCorp administered a survey of 14 questions to the stakeholders that attended the Complete Streets – City of North Las Vegas Workshop III. During a break from the workshop, DiamoCorp asked participants to answer all questions and informed participants that their answers

would be part of an evaluation for the city of North Las Vegas Complete Streets planning process. After the workshop, DiamoCorp sent out an email to all stakeholders in order to gather responses from stakeholders that did not attend Workshop III. DiamoCorp received one additional response from the first follow up email. Two weeks later, another reminder email was sent out only to those stakeholders who had still not participated in the surveys. One last participant filled out the survey after the final reminder was sent.

City of North Las Vegas participants represented different agencies across from North Las Vegas and beyond. Two participants were part of the private consultant group, Atkins, hired by the City of North Las Vegas to collect data. One participant was from the City of North Las Vegas Planning Department and two were from the City of Las Vegas. One member was from the University of Nevada, Las Vegas. Two members of the workshop committee were from Regional Transportation Commission. One stakeholder was from the non-profit agency Outside Las Vegas Foundation. There was one member from the Southern Nevada Health District, one participant from City of North Las Vegas, Public Works, and six participants from government, five of which have a staff of 51 people or more.

4. Findings

In the following section DiamoCorp shares its findings, organized in the same four categories as the research methods. The internal assessment expands on the roles of the study's leaders (Atkins, RTC, CNLV) and issues that delayed the projects progress. The benchmark studies introduce the terminology used to create a gap analysis for the nine examples DiamoCorp looked at. In the workshop

section DiamoCorp shares the outcomes of the three workshops as well as who attended, and lastly, DiamoCorp shares the results from the survey they distributed during Workshop III.

4.1 Internal Assessment

The three leaders of the CNLV Complete Streets Corridor Ranking Study are the City of North Las Vegas Planning Department, the Regional Transportation Commission, and Atkins International. The funding for the project is from RTC, whom is ultimately responsible to ensure the project is completed successfully and on time; thus, RTC is in charge of all administrative tasks (timeline/progress/finances). The City of North Las Vegas is the beneficiary of this project and is in charge of guiding the decision-making process and communicating needs or concerns with the hired consultant. Atkins International answers to both RTC and CNLV. Communication is not scheduled and happens informally approximately every two weeks. Through a \$153,000 contract between Atkins and CNLV, Atkins is in charge of the following tasks:

1. **Project Management and Coordination:** day to day administrative tasks, monitoring schedules and budgets, planning and preparing for progress meetings, and provide a study presentation for CNLV
2. **Collect, Review and Organize Information:** recruit a broad based group of stakeholders, organize Workshop I to introduce the project and discuss livability indicators, and organize GIS information
3. **Develop Prioritization Criteria:** identify and differentiate criteria at the area level, research Complete Streets best practices, determine and rank locations for Complete Streets treatments

4. Identify Complete Streets Improvements and Locations: identify eligible segments and intersections for improvements, review results and assess criteria, develop map of treatment locations
5. Develop Design Concepts: research and develop design concepts through qualitative assessments surrounding air quality, traffic speeds, cost, and maintenance
6. Identifying Possible Funding Sources: evaluate possible changes or procedures that may inhibit or create opportunities for funding
7. Project Documentation: prepare a “Complete Streets Investment Process” and a final report to share with CNLV, RTC, and stakeholders

After meeting with CNLV, RTC, and Atkins, DiamoCorp identified two items that slowed or restricted the study’s progress: 1) staffing and 2) data. The first item, staffing, relates to all three agencies. The City of North Las Vegas Planning Department has seen a huge reduction in staff; the office previously had 24 employees and now operates with 5. CNLV hired Atkins as a consultant because they lack the staff that could work on this study. Staff restrictions made it more challenging to gather and collect data from various agencies. Staffing in regards to RTC has been a challenge since the inception of the project in January. The study has already seen three different project managers. Turnover has made it difficult to make forward progress. This turnover and lack of steady leadership has slowed down Atkin’s ability to complete its tasks. For example, Workshop III was scheduled to occur in May, but Atkins had to wait for RTC to hire a new Project Manger before they could hold the meeting. Workshop III did not occur until July.

The second restriction was data. It became evident during Workshop II that some of the data collected for the study was either missing or outdated. Data was missing because neither CNLV nor Atkins could acquire it or because the data simply had never been collected. The outdated data made it difficult to make decisions related to indicators and possible site locations in North Las Vegas. Stakeholders had to rely on their individual knowledge of the City of North Las Vegas to make decisions when discussing items such as location of parks and hospitals and areas of high density versus low density.

Initially, the timeline and its deadlines were considered an issue, but after discussing the current timeline and the second half of the study with Atkins International DiamoCorp decided it is not a problem. The first half of the study included the organization of multiple stakeholders and took slightly longer than expected. Nevertheless, the second half does not involve workshops or stakeholders and will not experience the same setbacks as the first seven months.

4.2 Case Studies

DiamoCorp researched fifteen different case studies and chose nine to rank using the criteria previously stated (tables 1, 2, 3 and 4) in the methodology section of this report. After ranking the studies, DiamoCorp selected the top three to compare to the CNLV Complete Streets Corridor Ranking Study. The following is a list of the case studies DiamoCorp reviewed:

- Henderson, Nevada
- Chicago, Illinois
- Oakland, California

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- Sussex, New Jersey
- New Haven, Connecticut
- Lee County, Florida
- Traverse City, Michigan
- Knoxville, Tennessee
- Santé Fe, New Mexico

The top three benchmark studies and the focus of this section are found in the City of Henderson, NV; Chicago, IL and Oakland, CA. Some key points found in the case studies were a large and diversified stakeholder base; clearly defined criteria and methods for ranking corridors; organized community workshops, and strong leadership by fiscally and administratively sound agencies in a well-balanced environment.

- *Henderson, Nevada*

The City of Henderson (COH) is approximately 94.0 square miles of city; in comparison, CNLV is estimated at 100.4 square miles. The population of Henderson is 255,530 with a median income of \$55,949, median age of 36 years, and the median home sales estimated at \$238,100. The population of North Las Vegas is 216,162 with a median income of \$46,057, median age of 29 years, and the median home sales were \$161,400. The population density in Henderson in 2000, was 2,200.8 per square mile and in CNLV, it was 1,471.0 people per square mile. Both cities have a college, and looking at the overall makeup of each city shows that the differences between these two cities are not huge.

The success of Complete Streets in the City of Henderson has proven to be a positive change, to the aesthetics, safety measures and economic development as well as increase sustainable livability for its citizens. The *Water Street project* conducted design and implementation workshops with community involvement via Internet as a single corridor evaluation. Since the basis of the CNLV study is for multiple corridors, COH's Water Street case study was not chosen for the comparison with CNLV's complete street project.

Prior to working with CNLV, the RTC of Southern Nevada conducted a *Complete Streets Project* with COH using five evaluation factors (connectivity, safety, roadway design, mobility, and land use context) and three principals (relevance, trial and error, and feedback) from previous case studies. Together, these factors and principals created an extensive strategic plan for evaluating the ranking criteria.

Various approaches are discussed in the City of Henderson's Complete Streets Plan; three examples are the citywide plan, single corridor plan or the plan for multiple corridors. In regards to process the steps are as follows: first, establish the need, then check the compatibility, and finally conduct a citywide evaluation and ranking system. RTC of Southern Nevada gave each jurisdiction the ability to develop their criteria and evaluation process. The City of Henderson used CH2M Hill as their external consultant. CH2M HILL has worked as a consultant for several organizations on the of the top ten 'Best Complete Streets Policies.' CH2M HILL worked with COH on their Complete Street projects as well as with the City of Chicago.

- *Chicago, Illinois*

Chicago completed a comprehensive analysis of their city pertaining to pedestrian issues from 2005-2009; the analysis was a federally funded initiative. The City of Chicago used its most readily available resource, its five million citizens, to identify and report about the city's issues.

Chicago also utilized 'SeeClickFix' and 'Open311', web-based application systems that anyone in the world can access. Whether you are a resident or tourist, you can file an issue with the city using the Internet or mobile app and watch for status updates. Depending on the severity of the issue, the city has a strict policy to have certain issues fixed as soon as three business days or up to a year.

Chicago's plan for Complete Street Project was very comprehensive compared to that in CNLV. They had their funding from state taxes as well as from various grants. Research about Chicago's Complete Street study and project provided insights on how each portion throughout the entirety of the project was carried out. The pedestrian studies done between 2005 and 2009, created a database that was used to establish new policies and design better street typologies. The project included over 100 stakeholders from different community groups and sectors. Chicago felt that it was important to share their research and data statewide with similar county's, which would allow them to utilize it for their own Complete Street projects.

- *Oakland, California*

This case study has an extensive collection of documentation i.e. their scope of work, technical report, implementation, and final report(s) of the Complete Streets process. Two primary

work factors of this project were the 'Action Agenda' and 'Public Engagement'. The Action Agenda provided critical direction in establishing citywide Complete Streets priorities, performance targets, and specific action items to ensure timely progress with complete streets implementation.

The Public Engagement piece promoted a better understanding of how to design streets to enhance the quality of life in Oakland's neighborhoods. Even though this case study focused on one corridor, the city of Oakland has planned to move citywide with Complete Streets implementation projects.

Responses to a survey for the Oakland Complete Street project clearly stated that bicycle access was a high priority, followed by pedestrian and lastly transit access. A lot of commuters use Telegraph Avenue as their main travel route and/or they work nearby. The survey showed that the stakeholders' concerns were commuter safety in a multimodal environment, the speed of vehicles, and the reliability of the transit system. Improvements were prioritized by travel modes after selecting the Telegraph corridor.

The results of the survey and stakeholder interviews suggest that people see the current configuration of Telegraph Avenue as inadequate to suit the needs and usage patterns of bicyclists, pedestrians, and transit riders. There was a substantial agreement on the broad outline of what improvements Telegraph should entail; in particular, respondents recognized the need to improve the comfort and safety of pedestrians, bicyclists, and transit riders along Telegraph. Furthermore, respondents and stakeholders expressed a strong desire to calm traffic and reduce speeding. In

conjunction with the low priority placed on increasing traffic speeds and capacity, the community input illustrated the desire for re-imagining the corridor from a street that serves the needs of cars to one that serves the needs of the entire community.

4.3 Workshop Analysis

Atkins provided DiamoCorp with a timeline with set deadlines for study tasks and a “Scope of Services” that shows what should be discussed and achieved at each given time. DiamoCorp analyzed these workshops by observing if all scheduled objectives were discussed and completed in a timely manner, by recording the attendance of stakeholders, and by following up with CNLV and Atkins about how they felt about each workshop. The following paragraphs go into further detail about each workshop, including who attended the workshop, whether or not the workshop was held on time, and if the workshop met its set objectives.

- *Workshop I*

Workshop I was held prior to the beginning of this evaluation. Held at the North Las Vegas City Hall, the purpose of the meeting was to introduce working groups with project goals and objectives and to brainstorm about indicators that will provide insight to potential benefits of complete streets. The objectives were to identify indicators, data sources, and additional stakeholders. Using workshops is a new approach for CNLV to use for a transportation project, and it is based around 6 “Livability Principles,” which include: support existing communities, enhance economic competitiveness, provide more transportation choices, value communities and

neighborhoods, coordinate and leverage federal polices and investments, and promote equitable, affordable housing. Stakeholders were given an exercise that involved writing down ways to incorporate “Livability Principles” into this Complete Street Project.

Workshop I on Timeline	Late January
Workshop Date	January 28 th , 2014 (on time)
Attendance	RTC (2), CNLV (4), Clark County Health District (1), Clark County School District (1), Outside Lands Foundation (1), UNLV (1), ATKINS (3) = 7 groups, 13 total attendees

- *Workshop II*

Workshop II was held approximately a month behind schedule and started with the introduction of the new Project Manager for the study from RTC. Getting the Project Manger up to date required additional time and a slight pause in this planning process. There was a great turnout in attendance from stakeholders and productive discussion amongst them. Nonetheless, there was data missing and other data was outdated, which made it hard to see which areas were really in need of improvements. Geographic Information Systems (GIS) was the tool used to create maps for determining community and transportation system needs. Clicking between layers in GIS allowed stakeholders to see how different indicators such as crime and population density looked when overlapped with the CNLV. Atkins displayed a series of GIS maps to the attendees for their feedback related to indicators and their importance. There were 5 categories (transportation safety and security, health and active transportation, connectivity to centers of economic development, community cohesion, and communities of concern), and under each category there were two

columns (community issues and potential indicators). The exercise was helpful; however, discussion over some layers took up a large chunk of time and Atkins was unable to discuss all of them thoroughly. Creating a time frame for each topic would allow meetings to run smoothly and ensure that the facilitators address everything on the agenda.

Discussions about the five categories resulted in the following findings: For the “Transportation safety and security” category, stakeholders identified that actual speed data is important but not for this study; speed limits can be used instead. Crime rate data is only provided for a limited time (3 months) and may create a biased analysis based on a few infrequent events. Overall crash data may be sufficient for the crime and safety portion. Nevertheless, crash data by mode is not complete. Traffic volume and posted speeds can be obtained from the travel demand model. For the “Health and active transportation” category stakeholders identified access to trails and bicycle facilities as indicators. Methodology used to produce access maps may need to be revised. Information on healthcare centers to be updated with the SNHD. For “Connectivity to centers of economic development” stakeholders identified that the North 5th Corridor is a priority corridor for the CNLV, the origin and destination data obtained from the travel demand model will be used to generate connectivity maps, and more detailed conversations will be conducted with the City to determine the major activity centers. Lastly, in the “Communities of concern” category stakeholders identified that it is best to use all the data presented separately and not in a combined manner.

Workshop II on Timeline	Late March early April
Workshop Date	May 7 th , 2014 (behind schedule)
Attendance	RTC (2), CNLV (2), CLV (2), OLF (1), UNLV (2), CCHD (1), CCSD (1), ATKINS (2) = 8 Stakeholder groups, 13 total attendees

- **Workshop III**

Workshop III was slightly behind schedule and had low stakeholder attendance; less than 10 stakeholders representing five organizations were present. Although stakeholder attendance was low, the workshop was productive. The purpose of this workshop was to develop prioritization criteria and weight at the following area level categories: community concerns and connectivity of centers of economic development. Lead by Atkins, workshop attendees participated in two activities. The first was a polling activity; stakeholders ranked criteria that Atkins developed using input from the past workshop. Each polled question was followed up by a discussion among participants and a second round of polling was conducted to confirm results. DiamoCorp participated in the polling activity as well and comprised almost half of the polling results. Since we are not stakeholders in this complete streets project, the results may be skewed by DiamoCorp's participation. This activity was very useful, but confusion surrounding some of the indicators made it difficult for participants to respond.

Polling Results - Top Three Criteria for each Indicator:

- **Communities of Concern:**
 1. Low vehicle availability
 2. Low income
 3. Population density

- ***Connectivity to Centers of Economic Development***
 1. Downtown
 2. North 5th Corridor
 3. Cheyenne Technology Corridor
- ***Safety and Security***
 1. Overall traffic crashes
 2. Arterial density
 3. Proximity to high volume roadways
- ***Healthy and Active Transportation***
 1. Access to schools
 2. Overall crashes
 3. Access to transit stations

Out of the four categories attendees felt that “Health and active transportation” ranked the highest. Next was “Transportation safety and security” followed by “Connectivity to centers of economic development” and “Communities of concern ranking of least importance.

The second exercise involved splitting into two groups to brainstorm ideas that will help generate additional criteria for complete streets treatments. Each group thought of potential problems/improvements from the in the perspective of a Transit User, Auto User, Pedestrian, or Bicyclist in retrospective to one another. This was a very productive exercise, but if there were more stakeholders in attendance it would have been nice to hear the different ideas that were not thought of at the time.

Workshop III on Timeline	Early May
Workshop Date	June 28 th , 2014 (behind schedule)
Attendance	RTC (2), CNLV (1), CLV (2), CCSD (1), CCHD (1), UNLV (1) ATKINS (2) = 7 stakeholder groups, 10 total attendees

- *Goals for Workshop IV*

Workshop 4 will be held mid to late-August 2014 and should focus on developing detailed criteria. Prior to this workshop Atkins will compile the weighted results from Workshop III and create a GIS map with potentials areas to receive complete street treatments or additional connectivity. Stakeholders will provide their input to help Atkins determine which corridors are the best options for Complete Streets projects. After selecting potential corridors, Atkins and the stakeholders can focus on determining what levels of treatment each corridor will require.

4.4 Stakeholder Engagement

The survey DiamoCorp distributed to the stakeholders is in the appendix, and the table on the following page (Table 5) displays all of the stakeholders’ answers to the survey questions.

Seven respondents answered, “Yes” when asked if they had previous knowledge about Complete Streets projects. This knowledge from different agencies can be very beneficial for the City of North Las Vegas during their planning process. Any knowledge about Complete Street projects whether in Nevada or elsewhere can be applied to the City of North Las Vegas or at least can be compared to by the stakeholders. One participant had no previous knowledge about Complete Streets projects. This representative is still a crucial part of the planning process, as they are from one of the state’s universities.

Table 5. Stakeholder Responses to Interview Questions

	Response 1	Response 2	Response 3	Response 4	Response 5	Response 6	Response 7	Response 8	Response 9
TYPE OF ORG.	Gov.'t/ Public	Gov.'t/ Public	Other	Gov.'t/ Public	Non-Profit	Gov.'t/ Public	Gov.'t/ Public	Gov.'t/ Public	Gov.'t/ Public
SIZE OF ORG. STAFF	51+	51+	51+	51+	<5	51+	51+	21-50	51+
TYPE OF OFFICE	Local	State	National	Regional	State	Local	Local	Local	Local
PREVIOUS COMPLETE STREETS KNOWLEDGE	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PREVIOUSLY PARTICIPATED	No	Yes	Yes	Yes	No	Yes	No	No	No
WHY INTERESETED	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
EXPERTISE	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
IDEAL TIME SPENT	2-3 Hours	2-3 Hours	6+ Hours	2-3 Hours	2-3 Hours	2-3 Hours	2-3 Hours	2-3 Hours	2-3 Hours
WORKSHOP 1 PRODUCTIVENESS	Somewhat Productive	Somewhat Productive	Very Productive	Very Productive	N/A	Somewhat Productive	Very Productive	Somewhat Productive	N/A
WORKSHOP 2 PRODUCTIVENESS	Somewhat Productive	Somewhat Productive	Very Productive	Very Productive	Somewhat Productive	Very Productive	Very Productive	Somewhat Productive	Somewhat Productive
WORKSHOP 3 PRODUCTIVENESS	N/A	Somewhat Productive	Very Productive	Very Productive	N/A	Somewhat Productive	Very Productive	Somewhat Productive	Somewhat Productive
# OF WORKSHOPS ATTENDED	2	3	3	2	1	3	3	3	2
ABSENCE REASON	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
PLAN ON ATTENDING WORKSHOP 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Other	Yes
PARTICIPATE AGAIN	Yes	Do Not Know Yet	Yes	Yes	Yes	Yes	Yes	Yes	Do Not Know Yet
ADDITIONAL COMMENTS	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN

DiamoCorp asked all of the stakeholders how much time they would feel would be ideal for them to spend per month on reviewing materials for the Complete Streets workshops. CNLV and Atkins do not currently require stakeholders to contribute anytime to reviewing materials before workshops, but getting familiar with the content and developing questions prior to the workshops could be very

beneficial. Most participants answered that it would be ideal for them to spend two to three hours a month on reviewing workshop materials if provided with them in advance. Only one participant said six or more hours, but this participant would be considered an outlier or bias because they belong to the private consultant team hired to work specifically on this planning project. With this question's responses, facilitators of the meeting may be able to have more productive meetings because less time could be spent clarifying information and more time could be spent moving through the material (see Figure 1).

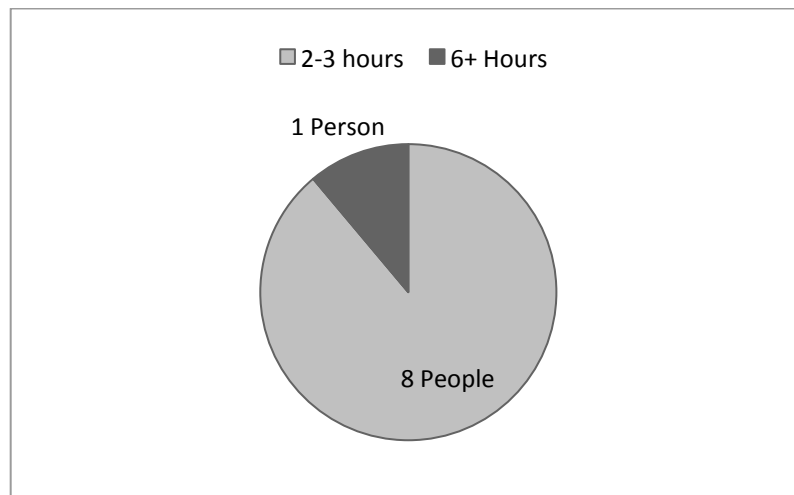


Figure 1. Stakeholders' Ideal Amount of Time to Spend Reviewing Materials per Month

All participants marked that the workshops they had attended were either "Somewhat Productive" or "Very Productive." Stakeholders were given five options on a Likert Scale to mark how productive they felt each workshop was "from the time he or she received the agenda until after he or

she left the meeting.” Although DiamoCorp cannot assume that all participants would also grade all workshops in the same manner, the results showed strong support that all workshop participants felt like the meetings were at least somewhat productive. For participants who attended Workshop I, four responded that they felt that it was somewhat productive and three said that they felt it was very productive. Workshop II received five answers for somewhat productive and four answers for very productive. Workshop II results show that one participant felt it was neither productive nor unproductive. Workshop II also received four somewhat productive answers and three stakeholders who felt that it had been very productive (see Figure 2).

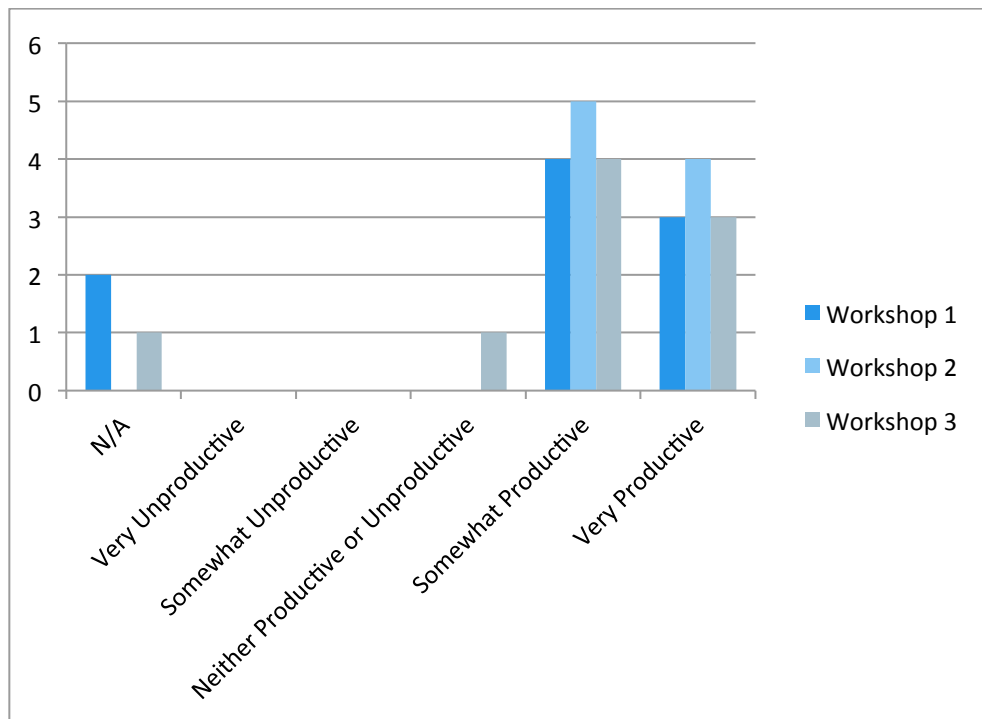


Figure 2. Stakeholders Opinions on Productiveness of Workshops

Another question that all participants were almost unanimous on was the question asking, “If given the opportunity, would you participate in workshops for future Complete Street projects?” Seven out of nine survey participants answered yes. The other two said they did not know yet, but did not specify why they were unsure (Figure 3). DiamoCorp cannot assume the stakeholders that did not participate would respond this way. The survey respondents all attended Workshop III, and they may represent a sample of more invested stakeholders (See Figure 3).

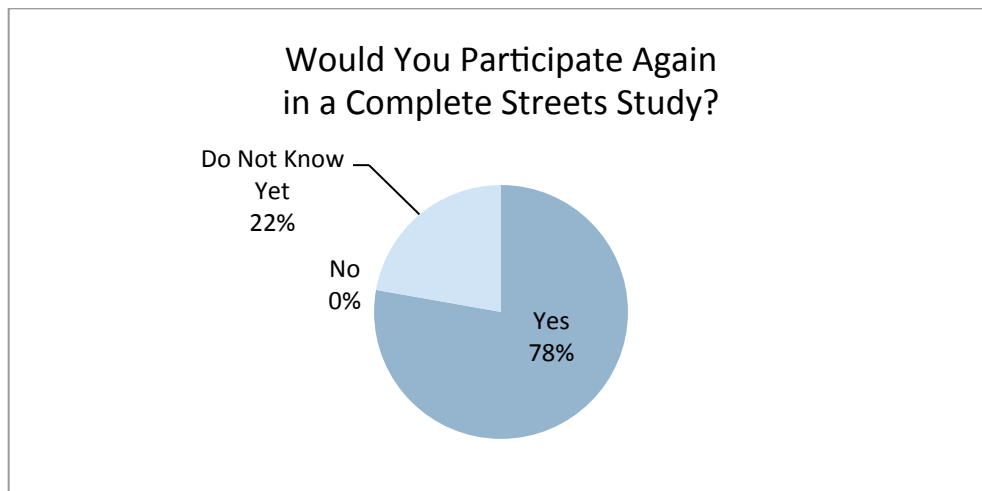


Figure 3. Stakeholder Participation in future Complete Streets Studies

5. Recommendations

Using their findings, DiamoCorp created a set of recommendations. Together, these recommendations create a toolbox that the City of North Las Vegas can use for future Complete Streets Corridor Ranking Studies. The recommendations are broken into two main sections. The first section “amending the approach” uses findings mostly from the internal assessment and case studies. Recommendations in this section focus on implementing best practices from other successful studies

and also on mitigating issues that occurred during the initial study such as data limitations. The second set of recommendations “improving engagement” focus on the workshop series and the stakeholders involved in the study. Recommendations in this section discuss the best way to maximize stakeholder time and expertise as well as whether or not the workshops are necessary in future studies.

Recommendations that could be implemented for the study that is currently in progress are discussed in the closing paragraphs of this report.

5.1 Amending the Approach – Recommendations from Internal Assessment and Case Studies

For future Complete Streets Corridor Ranking Studies in North Las Vegas, DiamoCorp recommends the following in regards to roles and responsibilities and mitigating issues experienced during the initial study. Because of the nature of this project, the leaders will be the same in future studies – City of North Las Vegas Planning Department and RTC. Since funding comes from RTC, they will act as the administrator and ensure that the project is completed successfully and on time. Unless the City of North Las Vegas Planning Department increases the size of its staff, DiamoCorp recommends that they hire an external consultant (Atkins or a new consultant) for future studies. Selecting a consultant company that is familiar with Complete Streets Projects and the needs/challenges of the City of North Las Vegas is preferred. The role of the consultant will change due to the work that has already been completed i.e. gathering data, selecting and ranking indicators, and determining corridors. The consultant in future studies will not need to host workshops with stakeholders; instead they will use the decisions made by the stakeholders to select potential project

sites using analytical tools designed to support decision making, such as GIS (Geographic Information Systems).

DiamoCorp recommends that the hired consultant gather data that was left out or missing from the first study such as commercial areas and sidewalk mapping. The timeline of one year can remain the same; the first half of the year should be spent gathering and preparing data rather than hosting workshops for stakeholders, and the second half should be spend selecting locations and creating a project proposal for implementation. We recommend that the City of North Las Vegas should reach out to stakeholders for feedback after they have identified corridors and possible site improvements.

After comparing and contrasting CNLV's Corridor Ranking Study with similar studies, DiamoCorp does feel that the CNLV has taken an effective approach to deciding on ranking criteria and selecting corridors. The following are recommendations based off by reviewing similar studies. The first recommendation would be to establish and define leadership roles with RTC, CNLV and the consulting firm. The roles of leadership were not clear to DiamoCorp at the beginning of this study. The second recommendation is to work with a consulting firm that has knowledge of the project area and/or worked on a complete street project before. The third recommendation is to research and utilize other types of funding and in-kind gifts; there is a wide range of prospects that should be looked at. Utilizing the local/regional higher education institutions to conduct joint research, surveys, internships, and to assist with administration could improve with the project's progress. The fourth recommendation is to review the findings from the Nevada Strong project and the COH complete streets case study. Since,

CNLV was closely involved in the research, the information should be shared. The formal report includes the summation of the data collected and is available to the public. The final recommendation for CNLV is to involve the community in the workshop process; a small group of citizens from the community can provide excellent feedback and insight to the issues of their community.

5.2 Improving Engagement – Recommendations from Workshop Analyses and Survey Responses

In regards to workshops, the first recommendation is to provide documents in advance so stakeholders are more familiar with what is presented at each workshop. The maps and data presented at the workshops were sometimes unclear to stakeholders, so to fix this problem it would be a good idea to get these documents to the stakeholders in advance. This allows the presentation to run smoothly without any complications with understanding the material. This may also get more stakeholders to attend; if they see something interesting or they are unclear about something, they will take the extra effort to get some clarity on the issue. The second recommendation would be to either actually go by the traditional format of a workshop or call it something different. According to Merriam-Webster, the definition of a workshop is “a usually brief intensive educational program for a relatively small group of people that focuses especially on techniques and skills in a particular field.” There were times when these “workshops” felt more like meetings and not educational workshops. Workshop III was the closest to a traditional workshop format because there were hands-on activities that allowed attendees to interact with each other.

DiamoCorp believes that workshops no longer needed after this initial planning process for the Complete Streets – City of North Las Vegas Corridor Ranking Study. The stakeholders' role in future endeavors will be to provide feedback on potential project, selected using more accurate GIS maps. Most stakeholders are willing to take a look at materials sent to them and provide their knowledge and input. Meetings may not be necessary as long as the data is clear. All data should be concise, easy to read, and leave no room for unclear results.

6. Conclusions

DiamoCorp concludes that the City of North Las Vegas has taken an effective approach to the planning process of their Complete Streets Corridor Ranking Study. The study is projected to finish on time and within budget; the stakeholders stated that workshops were a productive use of their time, and workshops achieved their intended outcomes. Although the approach was effective, DiamoCorp proposes the following recommendations for the current study: 1) Atkins should share and discuss workshop materials with RTC and CNLV prior to Workshop IV, 2) Atkins should also share workshop materials to stakeholders in advance, 3) CNLV should begin compiling a list of stakeholders that were not involved in the pilot study, but should be reached out to again in future studies, 4) CNLV should also analyze which data was missing or outdated for the pilot study and create a plan on how to collect this data for future studies, and lastly 5) CNLV, RTC, and Atkins can all benefit from reading reports from successful benchmark studies such as those from Oakland, Chicago, and the City of Henderson.

DiamoCorp

Although this is the first time the City of North Las Vegas has completed a Corridor Ranking Study, there are several successful examples for them to learn from.

DiamoCorp acknowledges that they were not involved with the study from the beginning, and that they will not get to see how the rest of the study plays out. The short amount of time that they were involved limits their ability to fully analyze the approach taken to complete this study. Ideally, DiamoCorp would be able to follow this study until it is completed in January 2015 in order to provide the City of North Las Vegas with a more thorough evaluation. Nevertheless, during the time DiamoCorp spent evaluating the ranking study, they did not have problems with their stakeholder groups (Atkins, RTC, CNLV) in regards to scheduling meetings, gathering information, and attending/participating in workshops. As of now, August 2014, DiamoCorp has confidence in RTC, Atkins, and CNLV to complete the Complete Streets Corridor Ranking Study, identify and rank treatment locations, develop treatment designs, and most importantly, improve the quality of life for the City of North Las Vegas' residents by providing a comprehensive, accessible, and safe transportation network.

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